# Khel Praveen

## Physical Education and Well-being

## Grade 9

0918

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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

**0918—KHEL PRAVEEN – PHYSICAL EDUCATION AND WELL-BEING**
Textbook for Grade 9

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# Foreword

The National Education Policy 2020 envisions an education system that is firmly rooted in India's civilisational wisdom, values, and ethical traditions. The rich intellectual heritage simultaneously enables learners to engage meaningfully with the complexities and possibilities of a rapidly changing world. The National Curriculum Framework for School Education (NCF-SE) 2023 provides concrete expression to this vision by laying out a coherent curricular pathway across stages of schooling that nurtures critical thinking, creativity, and sensitivity, along with the values and dispositions that are needed for responsible citizenship in an interconnected global society.

Learners have progressed through the Foundational, Preparatory, and Middle Stages, where their inherent potential has been nurtured holistically. Now, they enter the Secondary Stage with enhanced capacity for reflection, reasoning, enquiry, and self-expression. Spanning across Grades 9 to 12, also known as the adolescent stage, it marks a crucial period in the intellectual and personal growth of the students. It prepares them to engage with abstract ideas, complex social realities, ethical dilemmas, and the expanding universe of knowledge, while deepening their understanding of the self and the world around them.

The NCF-SE 2023 recommends that the curriculum for Grades 9–10 equips students with the skills that are needed to grow as they advance in their lives. Students can use these skills for reasoning, argumentation, and effective communication. It endeavours to enhance their analytical and descriptive capabilities to prepare them for the challenges and opportunities that await them. A diverse curriculum, covering ten subjects: three languages—including at least two languages native to India—Science, Mathematics, Social Sciences, Art Education, Physical Education and Well-being, Individuals in Society/Environmental Education, and Vocational Education, promotes their holistic development.

The curriculum upholds the principles of equity, inclusion, and accessibility as outlined in NCF-SE 2023. It ensures participation of all learners, irrespective of gender, ability, socio-economic background, or physical limitations. Special emphasis is placed on inclusive practices, disability awareness, gender equity, and culturally rooted

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physical activities, enabling students to develop empathy, respect for diversity, and ethical awareness. It is in this spirit that this book, the physical education and well-being textbook for the Secondary Stage has been conceptualised and developed.

The textbook presents a range of themes related to physical education, sports, and well-being, enabling students to connect their learning with real-life experiences and develop a balanced understanding of health and personal growth.

In addition to the theoretical concepts presented in *Khel Praveen*, this textbook focuses on practical engagement with sports and games, including team sports, individual sports, and indigenous games, providing students with opportunities to develop physical skills, teamwork, sportspersonship, and appreciation for India's rich sporting traditions. Overall this book promotes holistic development and inspires students to lead active, balanced, and responsible lives.

While this book serves as a central learning resource, it also encourages students to engage with a wider world of knowledge through books, media, digital platforms, sports communities, and experiential learning. The role of teachers, parents, and schools is therefore vital in fostering a culture of active participation, dialogue, and lifelong learning in the areas of physical education, sports, and well-being. The textbook also integrates technology through the use of QR codes in each unit, providing access to additional reading materials, demonstrations, activities, and digital resources that support both conceptual understanding and practical engagement. Besides QR code also includes content related to sports for the development of basic and advanced skills.

The National Council of Educational Research and Training acknowledges with deep appreciation the contributions of the Textbook Development Team, subject experts, pedagogues, practising teachers, reviewers, and all others who have supported the development of this textbook. We hope that *Khel Praveen* will inspires learners to think deeply, act firmly and confidently, and participate thoughtfully during challenges, both on and off the field. We also warmly welcome suggestions and feedback from all its users for further improvement in the subsequent editions.

Dinesh Prasad Saklani

*Director*

National Council of Educational Research and Training

New Delhi
*March 2026*

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# About the Book

Physical Education and Well-being is a foundational pillar of a child's holistic development. As articulated in the National Curriculum Framework for School Education 2023 (NCF-SE), education must nurture the physical, cognitive, social, and emotional dimensions of every learner. Physical activity, sport, and yoga are central to this vision—building bodily awareness, cultivating discipline, and laying the groundwork for lifelong health. The NCF-SE recognises yoga as an invaluable heritage of India's knowledge tradition, offering students a systematic path toward self-awareness, inner balance, and well-being that complements vigorous physical engagement.

This textbook series, with books titled *Khel Yoga* for the Preparatory Stage and *Khel Yatra* for the Middle Stage, embodies the vision of NCF-SE 2023. It draws on India's rich traditions—including yoga, indigenous games, and classical knowledge systems—while engaging with modern sports science, global sporting culture, and the values of the Olympic movement. It invites students not merely to understand, but to perform: to know why the body responds to exercise the way it does and then channelise the energies towards a better outcome. It also encourages the learner to appreciate the history and ethics behind the games they play, and to develop a personal relationship with well-being that will help them in every sphere of life.

Physical Education at the Secondary Stage is also a space for growing up. Grade 9 students are navigating adolescence—a time of change, curiosity, and self-discovery. This book offers practices that build resilience, self-regulation, mental tenacity and social sensitivity alongside physical competence. This textbook series is built on a carefully designed curricular progression across three stages. At the Preparatory Stage (Grades 3–5), the focus was on fundamental motor movements, basic fitness, physical literacy, indigenous games, and an introduction to yoga. Yoga entered the curriculum here for the first time, gently and playfully, fostering an early awareness of the body, holistic health, personal and social hygiene. Additionally, the learners performed 47 types of warm-up and cool-down exercises.

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At the Middle Stage (Grades 6–8), students strengthened their fitness levels while learning the basic skills of two to three sports in each grade, building knowledge of multiple sports and an understanding of gameplay. Yoga progressed systematically—*āsanas*, *prāṇāyāma*, and *dhyāna* were explored in greater depth gradually, and concepts from Indian philosophy began to enrich the practice. By the end of Grade 8, students had developed a solid foundation: physical literacy across multiple activities, an understanding of health and well-being, dietary and nutritional practices, and a deeper appreciation of personality through yoga. In this stage, the students also learnt 48 types of warm-up and cool-down exercises in addition to what they learnt in the Preparatory Stage.

Grade 9 marks a qualitative shift, wherein the scope widens and the lens sharpens. Students now engage with the science behind the body and movement, the history and values of Physical Education as a discipline, higher-order sports skills, and a more personal, reflective engagement with yoga. They are no longer just learning to play—they are learning to think about what it means to be physically educated, and to take increasing ownership of their health, development and duties towards the community and country.

**Curricular Goals for the Secondary Stage (Phase 1)**

The Physical Education curriculum for Grades 9 and 10 is guided by seven Curricular Goals, each of which reflects a dimension of the holistically educated learner. These goals are not isolated targets—they breathe through every unit, every activity, and every moment of reflection in the textbook.

| | |
|---|---|
| CG-1 | Demonstrates high-level competence in movement concepts, strategies, and principles while engaging in physical activities, including sports and dance. |
| CG-2 | Exhibits sensitivity and learns to navigate personal and social behaviour towards self and others. |
| CG-3 | Demonstrates social sensitivity and mental engagement in physical activity and game situations. |
| CG-4 | Plans and monitors personal physical fitness goals independently. |

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| | |
|---|---|
| CG-5 | Understands the value of physical activity for health, enjoyment, challenge, expression, and social interaction. |
| CG-6 | Assesses their own growth and development. |
| CG-7 | Learns about tournaments at international, national, state, district, and block levels. |

The Grade 9 textbook of Physical Education and Well-being, *Khel Praveen*, addresses its curricular goals through a variety of activity-based experiences designed to engage students both intellectually and physically. It also presents multiple sports disciplines from which students are required to select one, based on the resources and facilities available within their school.

**Ideas, values, and skills flow across units as follows:**

### Unit 1—Evolution of Physical Education and Well-being

This unit establishes the intellectual and scientific foundations of Physical Education as a discipline. The unit situates Physical Education within a broader historical and philosophical context. Students examine how the discipline has evolved over time—both in India and globally. It also opens up the question of career pathways in Physical Education. Students discover that the scope of the field extends well beyond being a player or a coach.

### Unit 2—Science and Sports

This unit invites learners to explore anatomy and physiology through the lens of their own movement and bodily involvement at playfields or while engaging in daily routine tasks at school and home. They also learn how regular physical activity, combined with an understanding of the body's key systems—breathing and respiratory, circulatory, and muscular contributes to overall well-being. This includes exploring how the body and brain work together to support a fulfilled and joyful life. Learners develop practical knowledge of warm-up and cool-down routines as essential tools for injury prevention and sustained fitness. The unit also introduces First Aid as a critical life skill, covering key procedures such as CPR and Basic Life Support (BLS), equipping students with the confidence and competence to respond in times of real-world emergencies.

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### Unit 3—Olympism

Sport does not exist in a vacuum. This unit traces the grand arc of the Olympic movement, from its ancient origins in Greece to its modern incarnation as the world's greatest celebration of human excellence. Learners encounter the evolution of the Olympics—the inclusion of women, the growth of the Paralympics, the Winter Olympics, and the Youth Olympics—as a historical story about human values: equality, dignity, and the relentless expansion of who counts as an athlete.

### Unit 4— Sports for All

Students examine the barriers faced by marginalised groups in accessing sport—barriers of gender, disability, class, geography, and identity. They learn about adaptive sports, para-athletics, and inclusive game design. In this unit, learners are urged to step into the shoes of those whose abilities vary from the masses, and they learn to walk along by maintaining the rhythm of steps. This unit develops social sensitivity and connects Physical Education to the wider purpose of building a just and compassionate world.

### Unit 5—Sports

Sport is both a personal pursuit and a cultural inheritance. This unit takes students on a journey through the breadth of human physical endeavour—from India's living sport and martial traditions such as, Mallakhamb, Thang-Ta, Gatka, and Kalaripayattu, which weave together physical mastery, discipline, and cultural identity, to the dynamic world of modern and international sport. Students explore combat disciplines, team games, and individual pursuits, developing not only technical awareness but an appreciation for the values—courage, respect, and sportspersonship—that all sport demands. Through this unit, students perceive sport not as a collection of separate activities but as a unified expression of human potential, community, and a lifelong commitment to health.

NCERT has published *Khel Yatra* for Grades 6 to 8 in which eight sports were introduced. If school wants to coach or students want to excel in any of them, they can refer to these books as well.

Introduction to Unit 5 is followed by elaboration of gymnastics and swimming and the remaining three chapters of this unit have separate QR codes in which the required skills and their execution are explained so that the students who want to meticulously learn and explore may have an opportunity to discover more.

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### Unit 6—Yoga for Holistic Health and Personal Excellence

This unit brings the inner life into focus. Yoga at Grade 9 is not a set of postures to be performed—it is a framework for living well. Students engage with the *Pañchakośha* framework (the five sheaths of human existence), deepening their understanding of health as something multidimensional and interconnected. Practices including *āsanas*, *prāṇāyāma*, and *dhyāna* are explored not only as techniques but as pathways to self-awareness. Through this unit, students build healthy lifestyles by exploring daily practices such as mindful eating (*āhāra*), quality sleep (*nidrā*), and energy management (*brahmacharya*), as well as the importance of good company (*satsaṅga*) and alignment with the body's natural rhythms. Yoga also supports adolescent well-being—equipping students with relaxation, breathing, and meditation practices to manage stress, emotional change, and peer pressure. *Shlokas* drawn from classical Indian philosophy weave through the unit, connecting ancient wisdom to the lived reality of a Grade 9 student.

**Structure of Classes, Learning, and Assessment**

Grade 9 Physical Education is allocated 90 hours across the academic year (approximately 135 periods of 40 minutes each), in line with the NCF-SE's illustrative suggestions of the NCF-SE. This time is a precious resource, designed to be used sportingly and wisely.

Each chapter in this book contains two interwoven kinds of content. The 'Knowing' sections provide the conceptual, historical, and scientific background that gives physical activity an origin and meaning. They are not lectures to be delivered—they are starting points for inquiry, discovery, discussion, and connecting to students', their peers and wards' own experiences. The 'Doing' sections—activities, games, fitness tasks, observation of physiological processes and movements, yoga practices, and engaging community activities—are the heart and soul of the lessons. They take precedence in time allocation and in energy levels. Physical Education is, above all, a bouquet of flowers—hard work, compassion, joy, and experiential learning coming together to make this village called the world a more beautiful place to live.

The dissemination and adaptation of the content shall be through a playway method, which not only enhances motor skills but also fosters the ability to apply physical and mental skills in real-time challenges

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on and off the field. Inculcation of the values and dispositions acquired through the text will partly happen while children are engaged in physical activities or games, and partly by being reinforced during circle time after the game. Sufficient time must be given for circle time during the Physical Education and Well-being periods.

Cross-cutting themes—Indian Knowledge Systems, gender sensitivity, value education, and inclusion—are not separate lessons. They are woven into the fabric of every unit, emerging naturally from the content and the conversation. Teachers are encouraged to notice and draw out these connections wherever they arise.

**Assessment**

Assessment in Physical Education at Grade 9 is designed to reflect the full breadth of learning—not just what students can do with their bodies, but what they understand, how they reflect, and how they contribute. The total marks allocation of 100 is distributed across the following three domains:

| Theory (40 marks) | Sports or Practical (40 marks) | Project (20 marks) |
|---|---|---|
| Units 1–6 | Fitness, Skills and Performance | Innovation and Community Involvement |

Theory assessments draw on the conceptual content of all six units. The sports/yoga/practical component rewards not only performance, but also fitness development, skill progression, and quality of play—recognising that excellence is a journey, not a fixed standard. The project component invites students to innovate and engage with their communities—designing inclusive games, conducting fitness surveys, documenting local sporting traditions, or creating awareness campaigns. Sports activities may extend into pre- or post-school hours when school feasibility allows, enabling students who show particular aptitude or passion to further develop their potential.

At the end of each unit, assessment activities invite students to take stock. These are not merely exercises in recording marks—they are opportunities to develop the habit of knowing oneself as a learner. Reflection tasks, writing prompts, and observation journals build critical thinking and help students articulate what they have

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come to understand. When students assess themselves honestly, they take ownership of their learning and that ownership is itself one of the most important outcomes of education.

This book does not ask students to treat its six units as separate subjects to be studied in isolation and then set aside. It asks them to let the learning accumulate, overlap, and speak to each other—the way physical education, in a full and active life, actually does. We hope this book is a companion in that journey—for teachers and students alike. You will surely enjoy this experience!

Atul Dubey
*Member-Coordinator*
Textbook Development Team

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# THE CONSTITUTION OF INDIA

## PREAMBLE

**WE, THE PEOPLE OF INDIA,** having solemnly resolved to constitute India into a [1]**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

**JUSTICE,** social, economic and political;

**LIBERTY** of thought, expression, belief, faith and worship;

**EQUALITY** of status and of opportunity; and to promote among them all

**FRATERNITY** assuring the dignity of the individual and the [2][unity and integrity of the Nation];

**IN OUR CONSTITUENT ASSEMBLY** this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

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1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

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# CONSTITUTION OF INDIA

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(Subject to certain conditions, some exceptions
and reasonable restrictions)

guarantees these

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**Right to Equality**

- before law and equal protection of laws;
- irrespective of religion, race, caste, sex or place of birth;
- of opportunity in public employment;
- by abolition of untouchability and titles.

**Right to Freedom**

- of expression, assembly, association, movement, residence and profession;
- of certain protections in respect of conviction for offences;
- of protection of life and personal liberty;
- of free and compulsory education for children between the age of six and fourteen years;
- of protection against arrest and detention in certain cases.

**Right against Exploitation**

- for prohibition of traffic in human beings and forced labour;
- for prohibition of employment of children in hazardous jobs.

**Right to Freedom of Religion**

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- freedom to manage religious affairs;
- freedom as to payment of taxes for promotion of any particular religion;
- freedom as to attendance at religious instruction or religious worship in certain educational institutions.

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- for protection of interests of minorities;
- for minorities to establish and administer educational institutions;
- saving of certain Laws 31A–31D.

**Right to Constitutional Remedies**

- by issuance of directions or orders or writs by the Supreme Court and High Courts for enforcement of these Fundamental Rights.

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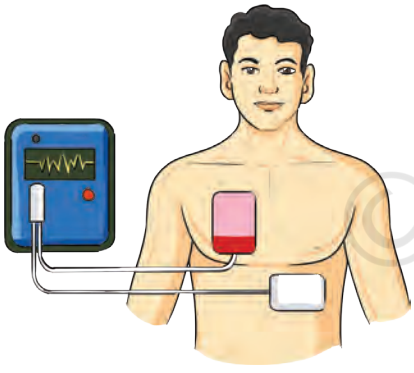


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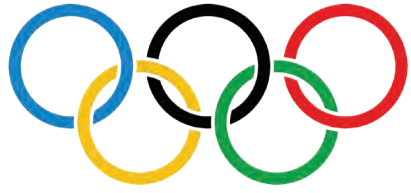

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UNIT

1

# Evolution of Physical Education and Well-being

0918UN01

*The first unit of this book explores the concept of physical education as a holistic approach to nurture the body, mind, and spirit. It emphasises the importance of physical activities, games, yoga, and sports in promoting physical fitness, emotional balance, mental calmness, and social values like respect, fairness, and cooperation.*

*The unit highlights the National Curriculum Framework for School Education (NCF-SE 2023), which integrates traditional Indian practices with modern sports to foster overall wellness and personal growth. The unit explores the meaning, definitions, aims, and objectives of physical education. It goes beyond physical activity, highlighting learning through the body to develop teamwork, discipline, and self-control. Scholars like Sri Aurobindo and organisations, like UNESCO, have highlighted the role of physical education in achieving holistic development. The aims include building character, instilling virtues such as, honesty and patience, and preparing students to be socially responsible and emotionally balanced individuals. This unit also focuses on physical literacy which is defined as the ability, confidence, and motivation to engage in physical activities throughout life. It includes developing locomotor, non-locomotor, and manipulative skills, which are essential for fitness, holistic health and overall development. The unit encourages students to reflect on their experiences with physical education and its impact on their growth. It also promotes the integration of fitness and well-being into daily life while informing students about various career pathways in physical education.*

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Chapter 1

# Physical Education and Well-being

लाघवं कर्मसामर्थ्यं स्थैर्यं दुःखसहिष्णुता ।
दोषक्षयोऽग्निवृद्धिश्च व्यायामादुपजायते ॥

*– चरकसंहिता, सूत्रस्थानम्, 7.32*

*Lāghavaṁ karma-sāmarthyaṁ sthairyaṁ duḥkha-sahiṣhṇutā ।*
*Doṣhakṣhayo'gni-vṛiddhiśh cha vyāyāmād upajāyate ॥*

*– Charaka-saṁhitā, Sūtra-sthānam, 7.32*

Physical exercise promotes a sense of lightness, enhances work capacity, improves stability, boosts immunity against illnesses, helps eliminate health issues, and supports a healthy metabolism.

The word 'education' creates an initial perception of books, classrooms, and exams. However, real education is not only about the mind, it is about the body as well. If the body is weak or unhealthy, the mind cannot focus, and if the mind is unwell, even a strong body feels tired.

In the Preparatory and Middle stages of school, you were introduced to various indigenous games, traditional sports, āsanas, prāṇāyāma, and other yogic practices. These activities not only built physical strength and stamina but also provided mental peace, discipline, and balance.

That is why physical education is an important part of our lives. It teaches us how to take care of our health, move and play, stay active, and balance studies with fitness. The National Curriculum Framework for School Education (NCF-SE 2023) names the subject as Physical Education and Well-being, since it not only helps us become physically fit and active but also promotes happiness, confidence, emotional balance, and mental calmness. It nurtures important values, such as, respect for others, fairness, honesty, and co-operation.

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Before we explore the meaning, aims, and importance of Physical Education, let us ask ourselves—how does Physical Education shape our bodies and improve the quality of our lives? How are movement, discipline, and fitness closely linked to living a better life?

## Meaning and Definitions of Physical Education

Physical Education is not just restricted to a sports period or an exercise class in school. It is not limited to drills, games, or physical activity alone, but is rather a process of learning through the body. It trains the body and the mind together. Every sprint develops speed and each repeated sprint improves endurance; every yoga posture builds balance and self-control; and every game teaches teamwork, strategy, confidence, and discipline—lessons that are useful in everyday life.

"The perfection of the body, as great a perfection as we can bring about by the means at our disposal, must be the ultimate aim of physical culture. Perfection is the true aim of all culture, the spiritual and psychic, the mental, the vital and it must be the aim of our physical culture also." – *Sri Aurobindo*

"Physical education is the process of education through physical activities. It is the development of the total personality of the child to its fullness and perfection in body, mind, and spirit." — *Central Advisory Board of Physical Education and Recreation (1959, India)*

*Fig. 1.1*

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"Physical education is education through physical activities for the development of the total overall personality of the child and its fulfilment and perfection in body, mind, and spirit." — *J.P. Thomas (1963 Indian educationist)*

"A fundamental right for all, physical education is an essential element of lifelong learning that contributes to holistic development, health, and quality of life." — *UNESCO (1978) International Charter of Physical Education and Sport, Paris*

"Physical education is an integral part of the total education process. Its aim is the development of physically, mentally, emotionally, and socially fit citizens through the medium of physical activities." — *Charles A. Bucher (Bucher, C. A. 1979)*

"Physical Education consists of movements, drills, exercises, yoga, games, sports, and other activities that promote mind-body wellness. Physical Education should provide a wide range of age-appropriate and level-appropriate physical activities that develop knowledge of the body, and of games and sports, together with a disposition towards perseverance, teamwork, and sportsmanship." – *NCF-SE 2023*

**LET US THINK**

In your previous classes, you learnt to develop friendships, mental tenacity, emotional resilience, learning to handle losses and looking beyond the victories through play. How have these been helping you in your everyday life?

## Aims of Physical Education

Imagine your school team is preparing for an inter-house sports event. Students of different backgrounds, abilities, and personalities are grouped together and asked to plan their practice sessions. Some of your teammates are fast runners, while some struggle with stamina. During practice, disagreements might arise. At times, a team loses a match, and at other times, they win.

*Fig. 1.2*

Physical Education is not limited to your physical training alone. It develops character and inculcates virtues such as honesty, patience, and fairness. When students play together, they learn to respect rules, accept victory with humility, and face defeat with

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courage. These qualities slowly become a part of their personalities and prepare them to live life with strength and dignity. While playing in teams and sharing responsibilities, they learn co-operation, equality, and respect for diversity.

The National Curriculum Framework–School Education (NCF-SE) 2023 also highlights that physical education should nurture mind-body wellness, resilience, empathy, co-operation, and fair play. In this way, the aim of physical education is not limited to physical fitness, but extends to enabling students to become socially responsible, emotionally balanced, and ready to contribute to the nation.

## Objectives of Physical Education

The objectives of physical education encompass the various ways in which it supports the growth of students and prepares them for the future.

### LET US EXPLORE

Write your experiences on how physical education and sports activities helped you in developing the given objectives in your own words.

*Fig. 1.3*

**Physical development**

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**Mental development**

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**Social development**

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**Emotional development**

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**Character formation**

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## READ AND REFLECT

Richa is a Grade 9 student, who spends most of her free time on mobile games and rarely engages in outdoor activities. Recently, her teachers noticed that she often feels tired, struggles to concentrate in class, and gets stressed before exams. During the annual sports day, her friends encouraged her to join a team game. At first, she hesitated, but slowly she started enjoying it. Over time, as she participated more in sports, she became more energetic, her focus in studies improved, and she learned how to co-operate with teammates. Her teachers also observed that she became calmer and more confident, even when she made mistakes.

- Which two objectives of physical education helped Richa improve her concentration and confidence?
- How did participation in team games help Richa in her social development?
- If Richa continues to play regularly and maintains healthy habits, which long-term benefit of physical education will she achieve?

Policy Support: The NEP 2020 mandates Physical Education and Well-being as a compulsory and core subject. This ensures adequate time and attention are given to physical education, making it an essential part of school education.

## PHYSICAL LITERACY

**How did you learn movements like throwing a ball, running, or balancing on one leg? Did you learn everything at once? What helped you to finally do them correctly?**

As you have learnt in your previous grades, it is physical literacy that enables us to execute various physical activities with ease in our daily life. Just as reading and writing develop language literacy, learning to move confidently while performing physical activities develops physical literacy. It means having the ability, confidence, and motivation to participate in different physical activities throughout life.

*Fig. 1.4*

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Physical Literacy includes:

- Physical ability such as running, throwing, balancing, and jumping
- Confidence in one's own movement and skills
- Motivation and interest to stay active and
- Understanding why physical activity is important for our health and well-being

## Benefits of Physical Literacy

After school, you might find yourself sitting for long hours—scrolling through your phone, watching videos, or playing games with little or no movement. Gradually, over time, the body feels stiff, muscles grow weaker, and the mind becomes tired or stressed. When you choose to step outside, play a sport, practise a skill, or simply move more, you feel a difference in your body and energy levels.

Developing physical literacy helps students build fitness, confidence, and healthy habits throughout their life. Several benefits of physical literacy are listed below:

- Improves overall health and physical fitness
- Builds confidence and self-esteem
- Helps prevent lifestyle diseases
- Develops teamwork, leadership, and decision-making skills
- Reduces anxiety and improves focus in studies

Movement skills are the building blocks of all physical activities. These fall under the umbrella of physical literacy and can be categorised into the following:

### Locomotor Skills

You have learnt skills like walking, jumping, leaping, hopping, and skipping in the Preparatory and Middle stages. These skills develop strength, speed, agility, and endurance which are known as locomotor skills. Activities like Kabaddi and Kho-Kho depend heavily on

*Fig. 1.5*

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these skills for chasing, dodging, and changing direction quickly.

*Fig. 1.6*

## Non-locomotor Skills

Non-locomotor skills are movements performed without mobilising the body from one place to another. These include bending, stretching, twisting, turning, balancing, and swaying. They develop stability, flexibility, and body control. Yoga predominantly uses non-locomotor skills. In postures like *Tāḍāsana* or *Vṛikṣhāsana*, learners must stay balanced and focused without moving from their positions.

## Manipulative Skills

Manipulative skills involve controlling objects with hands or feet. These include squeezing, throwing, catching, kicking, striking, rolling, and dribbling. They build hand-eye coordination, timing, focus, and judgement. Games like *Gillī-Daṇḍā*, cricket, football, and volleyball depend on manipulative skills. They help link brain coordination with physical action.

Movement skills are at the heart of physical literacy games like *Āṭyā-Pāṭyā*, Anding Oka, Turai Kar, *Nāḷugu Rāḷḷu Āṭa*, *Ghorpaḍīchhe Śhepūta*, etc., helping students develop speed, agility and coordination, while yoga asanas improve balance, stability, and body awareness. These activities reflect India's cultural heritage and support holistic development.

**Explore your school's library, search for *Khel Yoga* and *Khel Yatra* books of previous grades, and list down locomotor, non-locomotor and manipulative activities mentioned in them. Try to perform any two activities.**

*Fig. 1.7*

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## Exercises

1. At the Middle and Preparatory stages, you have played traditional games. Discuss how these games helped you to attain the objectives of physical education.
2. From the given options, circle the word which you think is appropriate for physical literacy, and discuss with your peers.

   Movement, skills, nutrition, fitness, confidence, sleep cycle, motivation, knowledge of health, rules, values

3. A student is skilled in football but avoids trying any new sport. According to you, which component of physical literacy might they need to develop? Discuss with your peer, parents and teachers.

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Chapter 2

# History and Culture of Physical Education in India

शरीरमाद्यं खलु धर्मसाधनम्।

– कुमारसम्भवम् – महाकवि कालिदास

*Śharīram-ādyaṁ khalu dharma-sādhanam।*

*– Mahākavi Kālidāsa in Kumāra-sambhavam*

This body is surely the foremost instrument of doing good deeds

*On a clear morning, in an ancient gurukula, a group of young students wake up before sunrise. After prayers, they begin their day with archery practise, aiming arrows at wooden targets set under the trees. Some students wrestle in the mud courtyard, while others engage in farm work or practise yoga postures. Only after this physical training, do they gather around their teacher for lessons in the Vedas, grammar, and philosophy.*

*From the gurukulas of the Vedic age to universities of ancient India, physical education had been practised regularly. This chapter takes you on a journey through tradition, showing how physical education was practised, celebrated, and gradually woven into daily life. We will also replicate these practices according to the contemporary scenario.*

The concept of education in India has always been holistic. It was never limited to reading and writing. Students were trained to develop the body and the mind together. Hence, physical training exercises, games, martial arts, and yoga were an important part of ancient life. Evidences for these are also found in the Vedas, epics, Ayurveda, and even various archaeological findings.

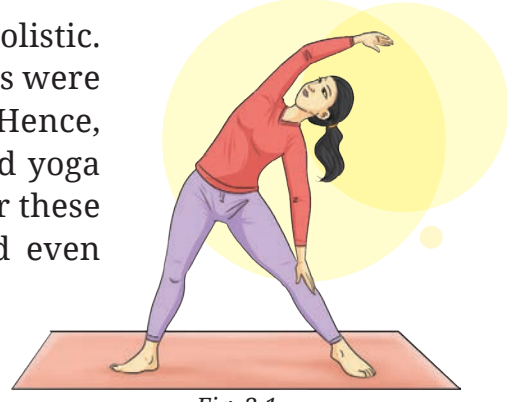

*Fig. 2.1*

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## Evolution of Physical Education in Indian Culture

**Vedic Period**
*Ṛigveda* describes chariot races and wrestling

***Yajurveda***
Highlights archery and *Dhanurveda*

***Atharvaveda***
Contains *mantras* about bows and arrows

**Epics**
*Rāmāyaṇa* and *Mahābhārata* depict martial training

**1st–2nd century CE**
*Charaka-saṁhitā* highlights exercise benefits

**3rd–6th century CE**
*Suśhruta-saṁhitā* emphasises moderate exercise

**4th century BCE**
*Arthaśhāstra* describes military training

**12th century CE**
*Mānasollāsa* mentions Mallakhamb

**13th century CE**
*Malla-purāṇa* describes wrestling exercises

**1854**
Wood's Despatch focuses on literary subjects

**19th century**
Indian Education Commission 1882, also called the Hunter Commission, recommends that schools encourage native games, gymnastics, drills, and other exercises

**1914**
The foundation of the Hanuman Vyayam Prasarak Mandal (HVPM) in Amravati, Maharashtra. The Vaidya brothers started it as an *akhara* but soon developed it into an institution that trained instructors in traditional Indian physical activities.

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**DID YOU KNOW?**

Ancient Indian texts like the *Charaka-saṁhitā* (c. 1st–2nd century CE) explain that exercise (*vyāyāma*) which is a foundational text of ayurveda highlights the need for balance between activity and rest, reflecting an early scientific understanding of fatigue and recovery.

*Suśhruta-saṁhitā* (c. 3rd–6th century CE) emphasises the importance of moderate exercise for good health and clearly instructs that it should be done only up to half of one's capacity.

## From Independent India to Present

1. **1948** — Tara Chand Committee — National Cadet Corps (NCC) was founded to build discipline and fitness among youth.
2. **1950** — Central Advisory Board on Physical Education was created.
3. **1957** — Lakshmibai College of Physical Education, Gwalior — a pioneer institute of Physical Education, was founded.
4. **1961** — National Institute of Sports (NIS) — a pioneer institute of coaching and development of coaches, was founded.
5. **1964** — Kothari commission – It was decided that PE should be treated as an essential part of general education, linked to health, social, moral, and spiritual development, not just athletics.
6. **1986** — National policy on education — directed that schools should spend about 8–10 per cent of teaching time on physical and health education.
7. **2005** — National Curriculum Framework (NCF) — emphasised that sports and yoga should be seen as a part of learning. Every school day should include time for physical activity.
8. **2020** — National Education Policy (NEP) — gave special importance to fitness, yoga, and sports as part of core curriculum. It called for equal focus on academics, arts, vocational, and physical education.
9. **2022** — National Curriculum Framework for Foundational Stage (NCF-FS) 2022 — emphasises Physical Education (PE) as vital for holistic child development.
10. **2023** — National Curriculum Framework for School Education (NCF-SE) 2023 — Health and Physical Education should be treated as a curricular area at the Secondary Stage (till Grade 10). It integrates traditional Indian games alongside modern sports, and link daily physical activity to life skills, values, and well-being.

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Long before marked playgrounds and stadiums existed, physical activity was part of everyday life. In early Indian societies, physical activities referred to daily movements, such as walking, running, swimming, lifting, farming, hunting, bathing, and martial training. Games were not separate leisure activities but were connected with health, discipline, social interaction, and preparation for life. For example, children learned to run while helping elders, balance while walking on uneven paths, and work together.

Cleanliness, strength, discipline, and co-operation were essential for survival and community living. Over time, these daily movements developed into organised training, martial skills, wrestling traditions, and, later, structured games. Physical fitness was valued as a means of maintaining health, fulfilling duties, and strengthening community life. Let us explore how physical activities and games evolved in early Indian society from prehistoric times to the colonial period.

## Activity

**Fig. 2.2 shows the Rock Shelters of Bhimbetka, and encircle the words that depict the scene in the box given below.**

Hunting, Gathering, Climbing, Running and Group movement, Equestrian, Javelin, Aqua sport, Cycling, Mace, Archery

*Fig. 2.2*

The rock paintings of pre-historic times show that early humans engaged in various activities that built physical strength, endurance, coordination, and cooperation. These activities required strength, endurance, and teamwork. The UNESCO World Heritage Report on the Rock Shelters of Bhimbetka records paintings depicting hunting

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scenes, use of weapons, and collective activities indicating that physical movement was central to daily life and social organisation.

People of the *Sindhu-Sarasvatī* civilisation led active daily lives. Physical activity was mainly linked to agriculture, construction, craftwork, walking through planned cities, and managing water systems. Structures such as the Great Bath of Mohenjo-Daro and water reservoirs at Dholavira show the importance of cleanliness, movement, and community effort. Physical activity was a part of daily work and community living.

### *Ṛigveda*

The Ṛigveda entails warriors, chariots, weapons, and physical strength indicating that courage, endurance, and combat ability were highly valued in early society.

### *Sāmaveda*

The *Sāmaveda* focuses on the chanting of hymns. Proper chanting requires disciplined posture, rhythm, and controlled breathing, showing coordination between the body and the voice. This reflects the importance of physical control and discipline in ritual practice.

### *Yajurveda*

The Yajurveda describes rituals that involved precise movements, balance and bodily steadiness. Such practices required control over the body and careful coordination, highlighting the role of physical discipline in religious life.

### *Atharvaveda*

The Atharvaveda places strong emphasis on health, bodily strength (*bala*), healing, and protection from disease. It reflects an early awareness of physical well-being and the need to maintain stability for a healthy life.

### *Upaniṣhads*

The *Upaniṣhads* (800–200 BCE) gave a spiritual meaning to physical strength. The *Kaṭhopaniṣhad* says, '*Nāyamātmā balahīnena labhyo na cha pramādāt tapaso vāpyaliṅgāt*|' which means "This self cannot be attained by the weak." It depicts the body as a chariot, the mind as the reins, the intellect as the driver, and the senses as horses. This shows that control of the body and senses was essential for higher wisdom.

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## BEFORE WE MOVE ON

*Vasiṣhṭha's Dhanurveda-saṁhitā*, belonging to the medieval period describes systematic training in archery, including posture, balance, controlled movement, and discipline. It also emphasises moderation in physical effort and ethical conduct, showing that martial training is focused on strength, control, and responsibility, rather than competition or sport.

During the Epic period, physical training became more organised and purposeful, especially as part of education and preparation for life. The great Indian epics, the *Rāmāyaṇa* and the *Mahābhārata*, describe how students were trained in archery, the use of weapons, physical strength and discipline under the guidance of teachers (*Guru*) in *gurukulas*. The *Mahābhārata* provides detailed descriptions of systematic training where students practised archery, mace fighting, and other forms of warfare including horse and chariot riding. These epics show that physical activity during the Epic period was closely linked with education, physical training, discipline, courage, and moral values.

*Fig. 2.3*

**शरीरचेष्टा या चेष्टा स्थैर्यार्था बलवर्धिनी ।**
**देहव्यायामसङ्ख्याता मात्रया तां समाचरेत् ॥**

***– चरकसंहिता, सूत्रस्थान 7, 31***

***Śharīra-cheṣhṭā yā cheṣhṭā sthairyārthā balavardhinī ।***
***Deha-vyāyāma-saṅkhyātā mātrayā tāṁ samācharet ॥***

***– Charaka-saṁhitā, Sūtra-sthāna, 7, 31***

The action of the body meant for stability and for increasing strength is known as physical exercise (*Deha-vyāyāma*). Such suitable physical movement bringing stability (in body) and increase in strength is known as *vyāyāma* (physical exercise). This has to be practiced in moderation (with apt control and for proper duration).

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During the early classical period, ideas about physical activity became more systematic, especially in relation to health, discipline, and state responsibilities. Texts from this period show that physical strength and bodily control were considered important for both personal well-being and effective administration. The *Arthaśhāstra* by Kauṭilya describes physical discipline, regular routine, and fitness particularly for rulers, soldiers and officials. The text also highlights cleanliness, order, and regulation of daily activities in cities, showing that physical preparedness and public health were matters of state concern.

According to ancient Indian knowledge, exercise is any physical activity of the body that is beneficial, improves stability, and increases strength. Such activity is called *vyāyāma*. However, this exercise should always be done in moderation, not excessively.

According to Āchārya Charaka, regular physical exercise makes the body light, strong, stable, and hardworking. It also improves pain tolerance, helps in balancing *doṣhas* and strengthens digestion and metabolism. All these benefits are achieved through proper exercise.

*Fig. 2.4*

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**DID YOU KNOW?**

In South India, *kalaripayaṭṭu* emerged as a systematic martial art practised in spaces for *kalari* that focused on flexibility, balance, strength, agility, and weapon training.

Wrestling (*malla-yuddha*) was practised in *akhāḍās* in northern, central, and western regions of India, while various stick and sword practices developed in eastern and central India. Although these traditions have ancient roots, most written records describing their methods belong to the medieval period.

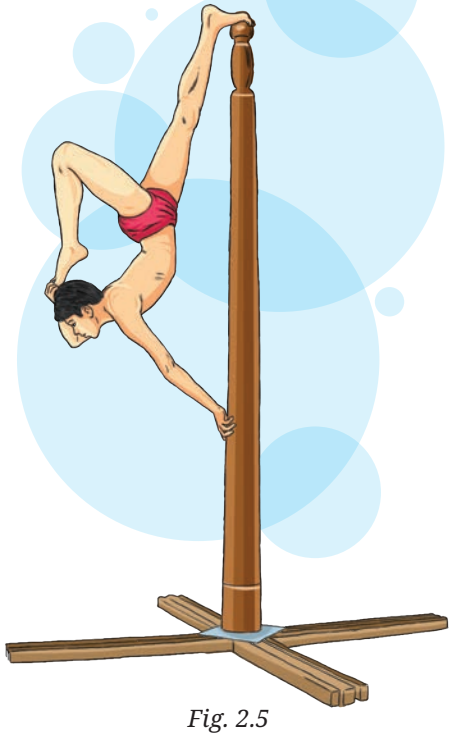

*Fig. 2.5*

## Medieval Physical Culture

The *Malla-purāṇa* (13th century CE) describes 16 types of wrestling exercises for strength and stamina. Wrestlers were expected to practice daily, combining drills with yoga postures. Wrestling was both a sport and a way to build character. The *Mānasollāsa* (12th century CE), written by King *Someśhvara* III, is the first text to mention Mallakhamb as a unique Indian sport where athletes perform acrobatic poses on a wooden pole. This exercise improved strength, balance, and flexibility, and its royal patronage shows how highly it was valued.

In medieval times, wrestling (*malla-yuddha*) became a community sport. Towns had *akhāḍās* (wrestling schools) where young people trained in *daṇḍs* (push-ups), *baiṭhaks* (squats), and weight lifting. Wrestling matches were held at fairs and festivals, attracting large crowds and strengthening community bonds.

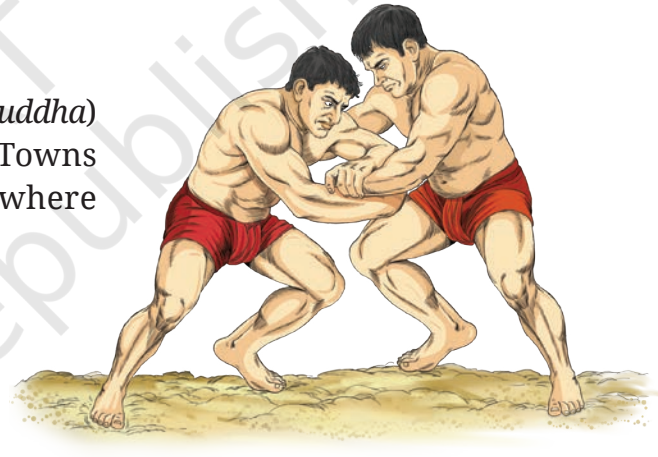

*Fig. 2.6*

### Late Medieval Period

During the late medieval period, physical activities were closely connected with military preparation and administration. The *Āʾīn-i-Akbarī* records that wrestling, archery, horse riding, and hunting were encouraged during the reign of Akbar. Contemporary Marathi chronicles describing the life of Chhatrapati Shivaji Maharaj, and Rajputana history describing the life of western Indian warriors show that physical endurance, agility, weapon training, and movement across difficult terrain were essential for warfare and defence. These activities focused on physical strength, mental resilience and readiness, unlike organised games.

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## Global Origins of Physical Education

While India followed its own traditions, in Europe the modern subject of Physical Education began to take shape in the 18th and 19th centuries. The term itself first appeared in English in 1748, in a translation of a French book, where it spoke about 'the physical education of children'. This shows that by the mid-1700s, Europeans had begun to think of training the body as an important part of education.

By the late 1700s, educational reformers were treating physical training as a part of general schooling. In Germany, Johann Christoph Friedrich GutsMuths, often called the "grandfather of Gymnastics", published *Gymnastics for Youth* in 1793. He designed exercises and games for children as part of their overall development. Another German, Friedrich Ludwig Jahn, wrote *Die deutsche Turnkunst* in 1816, promoting *Turnen* or organised gymnastics to build discipline, strength, and national pride. In Sweden, Per Henrik Ling developed a system of gymnastics that combined medical, military, and educational training.

These ideas also spread to America. In 1825, Charles Beck, a German who had moved to the United States, introduced gymnastics at the Round Hill School in Massachusetts and set up the first school gymnasium in the country. A few years later, in 1828, he translated Jahn's book into English as 'Treatise on Gymnasticks'. In the introduction, Beck even used the term physical education, helping to popularise the idea that training the body should be a part of school learning. In the middle of the 19th century, many schools in Europe and America had gymnastics, games, and drills as part of their daily timetable.

**DID YOU KNOW?**

The Swedish system of gymnastics developed by Per Henrik Ling later influenced military drills and even modern physiotherapy exercises!

## Colonial India

When the British introduced modern schooling in India, their main focus was on literary subjects. The famous Wood's Despatch of 1854 laid the foundation for schools and universities but did not include physical education.

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*Fig. 2.7*

British sports like cricket, hockey, and football entered Indian schools and clubs, often promoted by the princely states and their rulers. Indian rulers like the Maharaja of Patiala and Maharaja of Vijyanagar patronised cricket and hockey, while wrestling and traditional games continued outside the school system.

*Fig. 2.8*

In 1914, a major step was the foundation of the Hanuman Vyayam Prasarak Mandal (HVPM) in Amravati, Maharashtra. In 1920, Harry Crowe Buck, an American educator, started the YMCA College of Physical Education in Madras, which became the first professional institute for Physical Education in India. During the 1930s, more colleges opened in Hyderabad, Lucknow, and Bombay.

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**DID YOU KNOW?**

What did the city of Pune in Maharashtra give to the world? The history of badminton in India dates back to the 1860s, when British Army officers stationed in Pune adapted a local game called Poona or "Poonah" by adding a net and formalising the rules.

The Sargent Report of 1944 made physical education compulsory in all schools, and the All India Physical Education Conference in Amravati in 1946 brought educators from across the country together on one platform. These steps laid down the groundwork for India to step forward and make Physical Education an integral part of every student's education.

## Exercises

1. From the given options select words which according to you are promoted by the *Charaka-saṁhitā*? Discuss with your peers.

   Heaviness and sleepiness, exercise and rest, lightness of body, faster breathing, hunger and thirst, fatigue and recovery

2. On a map of India, encircle any state or region and name the games played there. Do they have different names across the country? Discuss how geographic terrain impacts the type of sport played in a particular region.

3. Write a list of shlokas from various epics and *Saṃhitā* which mention physical activities or physical culture.

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Chapter 3

# Careers in Physical Education

*It was Sports Day at School. The physical education teacher was giving warm-up instructions, the coach was guiding the relay team, the doctor was ready with first aid, the announcer was calling out the events, and the camera person was capturing the action.*

*Are all these part of a sports event?*

*Yes, Sports are a team effort, and you can also be a part of this team! Physical Education opens the door to many different careers. It is not only about playing — it is about teaching, coaching, science, fitness, media, and even management.*

Let us now learn about the possible career paths that can be chosen, after studying Physical Education.

**Area/Category:** Therapeutic Modality

| Role | Description | Qualification |
|---|---|---|
| Physiotherapist | Helps with injury treatment and recovery | BPT + specialisation |
| Sports Nutritionist | Plans diet for performance and recovery | B.Sc./M.Sc. Nutrition |
| Sports Psychologist | Improves mental strength and focus | Degree in Sports Psychology |
| Sports Biomechanist | Analyses movement and technique | Degree in Biomechanics |
| Exercise/Sports Physiologist | Studies body response to training | Degree in Exercise Physiology |

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**Area/Category:** Teaching and Coaching

| Role | Description | Qualification |
|---|---|---|
| School PE Teacher | Guides students in fitness, games, yoga, and healthy habits | NCTE-approved PE programme |
| College/ University PE Teacher | Teaches sports science subjects and trains future professionals | NCTE-approved qualification |
| Sports Coach | Trains athletes and teams | B.P.Ed/M.P.Ed as well as coaching certificates |

**Area/Category:** Fitness and Wellness Industry

| Role | Description | Qualification |
|---|---|---|
| Fitness Trainer | Guides gym workouts and design fitness plans | Certificate/ Diploma |
| Yoga Practices | Teaches yoga and meditation | Diploma/ Certificate in Yoga |
| Aerobics/ Zumba/Pilates Instructor | Leads group fitness classes | Short-term certification |

**Area/Category:** Emerging Careers

| Role | Description | Qualification |
|---|---|---|
| Esports Coach/ Fitness Expert | Trains gamers' fitness and reflexes | Gaming + fitness knowledge |
| Adventure Sports Guide | Leads trekking, rafting, climbing | Training from adventure institutes |
| Sports Technologist | Develops wearables and tech in training | Technology + Sports Science |
| Para-Sports Trainer | Trains differently-abled athletes | PE + adaptive sports certification |

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**Area/Category:** Sports Management and Media

| Role | Description | Qualification |
|---|---|---|
| Sports Event Manager | Organises tournaments and events | Degree/Diploma in Sports Management |
| Sports Administrator | Manages sports bodies and policies | Degree/Diploma in Sports Management |
| Sports Journalist/ Commentator | Reports and comments on sports | Journalism/Media Management degree or diploma |
| Sports Data Analyst | Analyses performance data | Statistics/CS/Sports Science |
| Sports Engineer | Develops sports equipment and technology | Engineering + specialisation |

### TRIVIA

Before the FIFA World Cup, the Swedish national football team built a support staff that worked for 21 months to prepare players. This backend team included:

- Performance Analysts
- Medical Practitioner and Physiotherapists
- Fitness and Strength Coaches
- Mental Performance Specialists
- Logistics and Travel Coordinators

The staff's job was not only to train players but also to monitor recovery, plan travel, and prepare strategies using match analysis. This ensured that athletes were supported in every way—physically, mentally, and logistically. This example shows how international teams depend on a wide network of professionals, proving that careers in Physical Education and Sports Sciences are global.

**Choose a suitable role in your school team for yourself based on your interest and capacity.**

## Exercises

1. Name any four professions who not only help people earn a living but also contribute to a healthy and balanced society. Write what you think of their roles.
2. Discuss with your peers and teachers the different career options students can choose based on the subjects they study.
3. You have learned about different careers in sports. Which sports professional do you admire the most? Why do you like them and how do they inspire you?

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Chapter 4

# Fitness and its Components

*On the first day of fitness week at school, the Physical Education teacher asked the students to start with a short run. Ravi completed the lap quickly. Aisha ran at a steady pace without stopping. Anurag could not run very fast, but he balanced extremely well during a yoga pose. Observing all the students, the teacher smiled and said, "All of you are fit in different ways. It is not the same for every person."*

*Being fit is not only about speed or strength. It is about balance, flexibility, endurance and confidence.*

## Types of Fitness and Their Components

Fitness is the ability of the body to work efficiently, stay healthy and perform daily activities without getting tired. A fit student can run, jump, lift, play and concentrate better in school. Fitness is not only about strength or long-distance running. It includes different types of abilities that help the body move smoothly and stay active. There are two main types of fitness, namely, Health-related Fitness and Skill-related Fitness. Both are important for students because they support overall growth, sports performance and well-being.

## Health-related Fitness Components

Health-related fitness components help maintain good health, prevent diseases, and support everyday activities. They are important for all students, whether they play sports or not.

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### Cardiovascular Endurance

It is the ability of the heart and lungs to supply oxygen to the body during physical activity. A student with good endurance can run, cycle or swim for a long time without getting tired. It includes jogging for 10 minutes during warm-up, skipping rope, or running a long-distance race.

### Muscular Strength

It is the ability of a muscle to overcome resistance which could be in the form of body weight, air, water or any other objects. It is required for lifting, pushing, holding or carrying objects like books, doing push-ups, and holding a yoga posture.

### Muscular Endurance

It is the ability of muscles to work for a long period without getting tired. It can be built by performing repeated sit-ups, holding *Vṛikṣhāsana* for 20 seconds or cycling without stopping.

### Flexibility

It is the ability of joints to move through a full range of motion. Flexible students can bend, stretch or turn without difficulty. Flexibility can be improved by performing forward bending in Yoga, stretching hamstrings, or movements in dance.

### Body Composition

It is the proportion of fat, muscle, and bone in the body. A healthy body composition supports better movement and prevents lifestyle diseases. Balanced diet and regular physical activity help maintain a healthy body composition.

## Skill-related Fitness Components

These components help students perform better in games and sports. They support speed, coordination, and quick movement. However, skill-related fitness is not only for sports. It is an important part of daily life, physical literacy, and overall development. While players use these skills in sports, every person uses them in day-to-day activities. They help us stay active, independent, and confident.

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## DID YOU KNOW?

There are two types of isometric strength–

(a) Overcoming isometric: Pushing Isometrics Muscle Action (PIMA) also known as overcoming isometrics is when you apply force against an immovable object (for example, pushing a wall).

(b) Yielding isometric: Holding Isometric Muscle Action (HIMA) also referred to as yielding isometrics is when you resist an external load and prevent movement (for example, holding a weight in a fixed position).

### 1 Speed

Speed is the ability to move from one point to another quickly. For example a short sprint in athletics or relay, or daily activities like catching a bus, etc.

### 2 Agility

Agility is the ability to change direction quickly while maintaining balance. For example, dodging in Kho-Kho or moving from side to side in badminton. It is also helpful while moving through a crowded market, avoiding obstacles or changing direction while walking.

### 3 Balance

Balance helps maintain body position irrespective of whether the body is still or moving. For example, holding *Vṛikṣhāsana* or balancing *Gillī-Daṇḍā* before striking. In daily life, balance is used while standing in a moving bus, walking on uneven roads, or climbing stairs safely.

### 4 Coordination

Coordination is the ability to use different body parts smoothly together. Hand–eye coordination is used while catching a ball and foot–eye coordination is used while kicking a football. Coordination is also used while performing daily chores like writing, cutting vegetables, using a computer, driving or operating tools.

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## 5 Power

Power is a combination of strength and speed. It helps the body perform explosive movements. Jumping high in volleyball, throwing a javelin, or performing a powerful leap in athletics are expressions of physical power. It is also needed for lifting school bags quickly, helping with household tasks or getting up from the floor smoothly.

## 6 Reaction Time

Reaction time is how quickly a person responds to a signal. It includes starting to run when the whistle blows, and catching the ball quickly in cricket. In day-to-day life, it is important for stopping quickly while riding a bicycle, avoiding a falling object, or responding to a sudden movement.

## Importance of Skill-related Fitness

Skill-related fitness helps learning in the following ways:

- Improved hand control in day-to-day tasks.
- Improved catching, throwing, jumping and coordination.
- Increased confidence in team games and rhythmic activities.
- Improved posture and stability in Yoga practices.
- Stronger foundation for sports participation in later classes.

### Activity

Divide the students into groups and ask them to select any one profession. Discuss the importance of fitness in their chosen profession.

## Exercises

1. From the word given below, underline the ones related to health-related fitness and encircle the ones related to skill-related fitness.

   Body Composition, flexibility, cardiovascular endurance, balance, muscular strength, muscular endurance, speed, agility, power, coordination and reaction time

2. Combine strength, flexibility, and endurance exercises into a simple 15-minute routine. Write one benefit of each type of exercise.
3. Calculate your Body Mass Index (BMI) and identify which category you fall into based on the World Health Organisation guidelines.

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## Check Your Progress

### Answer in brief

1. A student has adequate knowledge of fitness but lacks motivation to attend PE classes. Which domain of physical literacy needs improvement? Suggest one strategy to help increase motivation.
2. Explain how physical literacy is connected to overall wellness (physical, mental, emotional, and social health).
3. Write about any two indigenous sports of India and explain how each is played.
4. Name any four sports played worldwide today that originated or were played in India from ancient times.
5. Construct a simple weekly fitness plan including exercises, rest, and healthy food to improve physical and mental well-being.
6. Design a school day routine that combines exercise, healthy meals, and study breaks. Explain how this routine helps you stay energetic and focused.

### Answer the following in detail

1. How can participating in team sports improve both the physical and social aspects of physical literacy?
2. Create a flowchart from the prehistoric till ancient period with changes in the philosophy of physical education.
3. Do you think skill-related fitness is useful only for athletes? Justify your answer.
4. Compare two favourite sports that you play and explain which components of fitness are most important for each.
5. Design a one-week fitness plan for yourself or your family that includes both health-related and skill-related components under the guidance of a physical education teacher. Explain your choices.
6. Justify the importance of the subjects that you have studied till now, and explain how these subjects serve as pathways that guide students toward different career opportunities in the field of physical education or sports.

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UNIT

2

0918UN02

# Science and Sports

*This unit delves into the scientific understanding of the human body and its systems, emphasising their role in physical activity and sports. It explores anatomy, physiology, and movement science, helping students understand how the body functions during movement. The unit highlights the importance of maintaining a healthy body through proper care of bones, muscles, joints, and the cardiovascular and respiratory systems. It also introduces concepts like cellular respiration, the structure and function of the heart, and the circulatory system, emphasising their role in physical performance. The unit explains the classification of joints, muscles, and their movements, providing insights into how the body generates force, strength, and power. It also discusses the types of levers in the body and their role in movement. Students are encouraged to observe and analyse their own physical activities, such as kicking or throwing a ball, to identify the muscles and joints involved. This hands-on approach helps students connect theoretical knowledge with practical applications. Additionally, the unit highlights the effects of exercise on the body, comparing short-term and long-term changes in various systems. It emphasises the importance of warm-up and cool-down exercises, proper breathing techniques, and understanding the body's adaptation to physical activity. Through engaging activities and exercises, students learn how to optimise their physical performance and maintain holistic well-being.*

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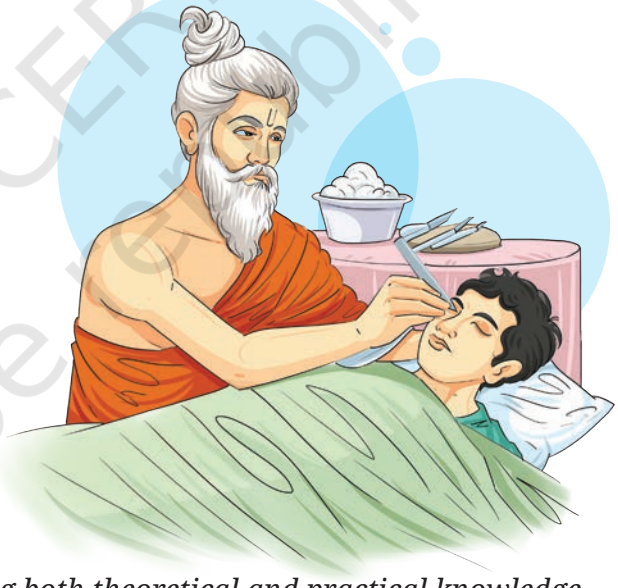
Chapter 5

# Understanding Our Body

*In the previous unit, we learned a couplet from the epic of Kumārasaṃbhavam describing that all the duties in life or all the actions and skills in sports are only performed through our body. Therefore, it is necessary to understand the structures, systems, and mechanisms of our body, which include the bones, the muscles, and various other systems. While performing physical activities on the ground, we witnessed some extra tension in the muscles, panting, relaxing, heating, etc. Why do these and other similar changes occur in the body? We will study this in the present unit.*

*India stands out for developing one of the oldest medical systems in the world through Vedic philosophy and the Ayurvedic tradition.*



*One of the greatest figures in this field was Maharṣhi Suśhruta, who is remembered as the 'Father of Surgery'.*

*Maharṣhi Suśhruta lived and learned with his teacher, observing and practising medicine in real-life situations. His studies were deeply rooted in Ayurveda, known as the 'science of life'. From a young age, Maharṣhi Suśhruta was also trained in herbal medicine, gaining both theoretical and practical knowledge.*

*Maharṣhi Suśhruta's contributions laid the foundation for modern medicine and surgery. His teachings spread to China, Arabic, Persian, and European countries, influencing later physicians and scientists. Many of his techniques, such as rhinoplasty (nose reconstruction), are still used in modified forms today. His life and work remind us that science and compassion must go hand in hand.*

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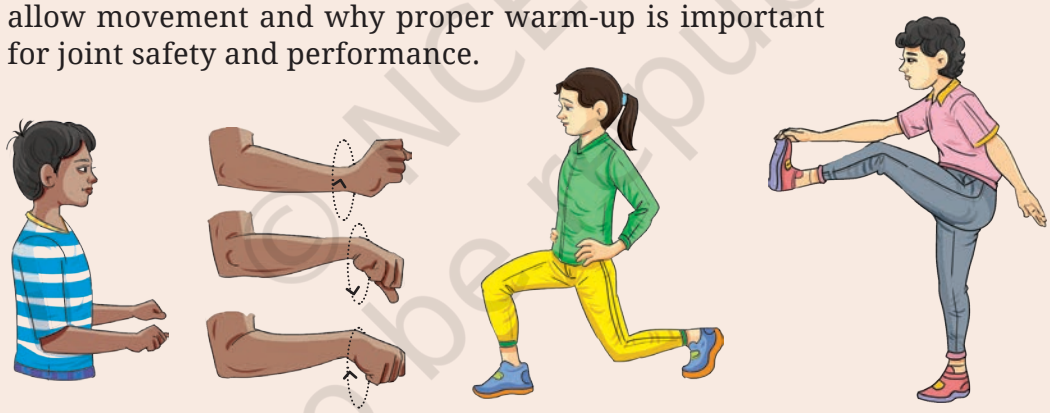
### Activity

Straighten up your legs and grip your thighs to feel the muscles while sitting on the bench in the classroom. Identify which movement is related with squeezing and releasing the tension of the muscles of your thighs.

The scientific study of the structure of the human body is known as human anatomy. It is about understanding 'what' our body parts are and 'where' they are located. Physiology, on the other hand, is the study of how different organs and systems of the human body function to maintain life. While anatomy shows us the 'what' and 'where', physiology explains the 'how' and 'why' of bodily functions.

### Activity

Perform controlled movements such as wrist rotation, knee bends, toe raise and arm swing. For each movement, identify the joint being used (shoulder, knee, ankle, or neck) and describe the type of movement it allows. Then perform gentle dynamic stretches and observe how the joint moves more easily after warming up. This activity helps students understand how joints allow movement and why proper warm-up is important for joint safety and performance.



Wrist rotation | Knee bend | Toe raise and arm swing

*Fig. 5.1*

## Bone

Bone is a 'strong and rigid' type of connective tissue that makes up most of skeleton and gives the body its structure. The types of bones are shown in Fig. 5.2. It is active and always repairing and rebuilding itself. If a bone is injured, it can usually heal and function normally again, depending on the severity of the injury.

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## Activity

Let us play a game. Make a group of five members, and prepare five chits with one bone type written on each chit.

Each member will pick a chit and indicate the location of the mentioned bone on their body.

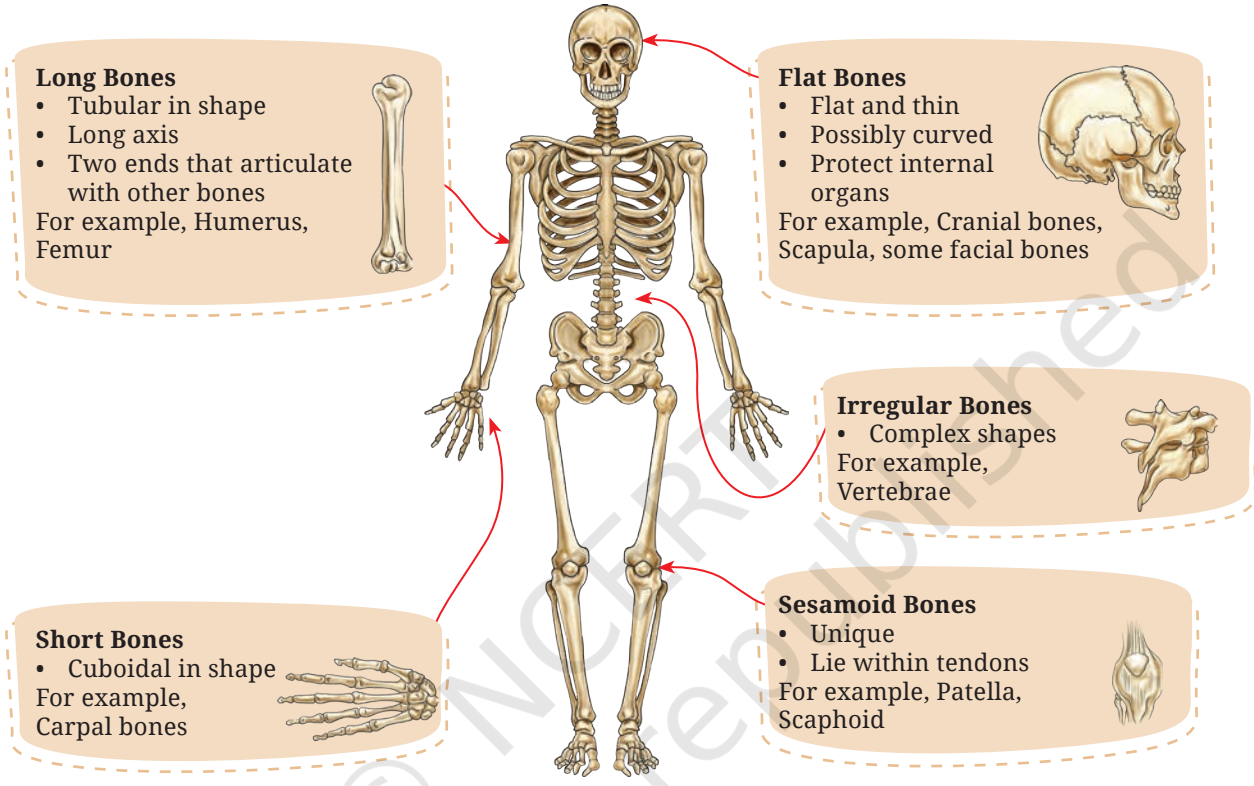


*Fig. 5.2: Skeletal system*

## CARTILAGE

A cartilage is a tough yet flexible connective tissue that helps protect bones and joints by absorbing shock. They are indicated in Fig. 5.3. The cartilage found at the end of bones minimises friction and keeps them from grinding against each other during movement. In some areas of the body, cartilage also serves as the primary tissue, giving those structures form and shape. Cartilage damage can occur suddenly from injuries such as sports injuries or trauma, but it can also develop gradually over time (overuse injuries).

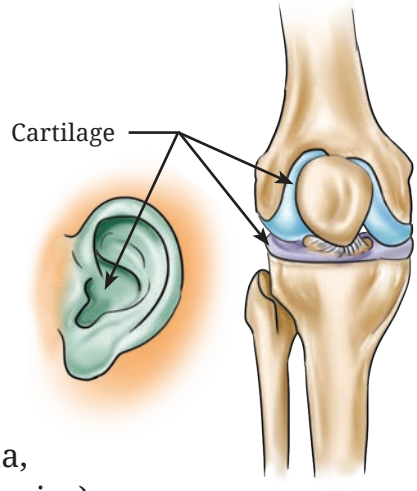


*Fig. 5.3: Cartilage*

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## Activity

1. Why do you think the calf muscles tendon which is inserted into the calcaneus is called Achilles tendon?
   After your teacher narrates the story behind this name, discuss the values you learned from it, and identify a similar story from the Indian epic *Mahābhārata*.
2. With the pinch grip, try to hold and feel the texture of your Achilles Tendon below the calf muscle and above the heel bone, as shown in Fig. 5.4 Is it similar to what you feel when you touch your ear? Discuss the similarities and differences with your peers.

*Fig. 5.4*

## Tendon

A tendon is a tough, flexible band of tissue that attaches muscles to bones, allowing your limbs to move. It also helps protect muscles from injury by absorbing part of the impact that occurs during activities such as running, jumping, landing or other movements.

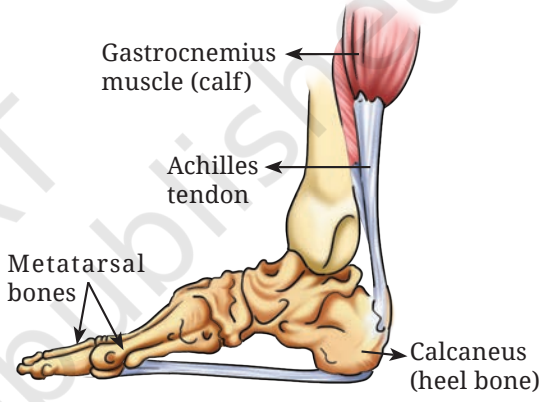


*Fig. 5.5: Tendon*

**DID YOU KNOW?**

The total amount of movement that occurs in a joint in a particular direction is known as 'range of motion'.

## Ligaments

Ligaments are strong, fibrous bands of connective tissue that link bones to one another and help stabilise key structures in the body, including joints and certain organs. They connect bones to maintain the integrity of the skeleton, secure the ends of bones within a joint, guiding and limiting their movement, strengthening the joints, and reducing the risk of injuries.

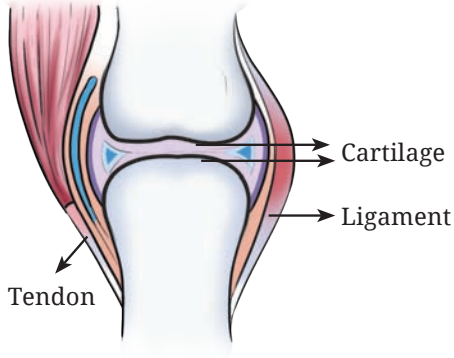


*Fig. 5.6: Ligament*

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At the beginning of the chapter, we had activities involving various movements that use different joints. Let's recall those movements and try to understand the different types of joints.

## JOINT

A joint (also called an articulation) is a location where two or more bones meet to form a connection that allows movement. Joints in the human body function as hinges, pivots, and sliding mechanisms, providing mobility and enabling human locomotion. Joints also provide structural support and stability to the skeletal system. They are classified below on the basis of structure and function.

### Classification of Joints

### Structural Classification

- **Fibrous joint** is a type of joint in the body in which bones are connected by a dense fibrous connective tissue, like collagen which provides strength and stability (for example, skull), with no direct movement (head protection in contact sports like boxing).

*Fig. 5.7: Fibrous joint (Immoveable joint)*

*Fig. 5.8: Cartilaginous joint (Semi-moveable joint)*

- **Cartilaginous joints** are a type of joint where bones are connected by cartilage, allowing for some movement but less than that in synovial joints (for example, vertebrae). It provides pelvic stability during sprinting.

- **Synovial joints** are freely movable joints characterised by a fluid-filled cavity covered by a membrane known as the synovial membrane between articulating bones (for example, knee, shoulder, etc.). It helps in wrist gliding in gymnastics.

*Fig. 5.9: Synovial joint (Freely moveable joint)*

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## Functional Classification

Skull suture

- **Immoveable joints** are a type of joint that allow for no movement under normal conditions. These joints are characterised by the close proximity of the articulating bones, which are held together by fibrous connective tissue or cartilage, with no joint cavity (for example, skull).

*Fig. 5.10: Immoveable joint*

Pubic symphysis

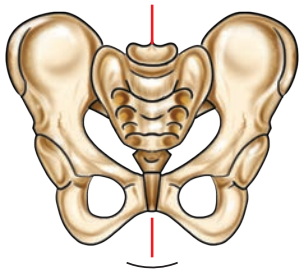

*Fig. 5.11: Slightly moveable joint*

- **Slightly moveable joints** are a type of joint that allow for a limited range of motion. These joints are characterised by bones connected by cartilage or fibrous connective tissue, enabling some degree of movement while maintaining stability (for example, vertebrae or spine, etc.).

- **Freely moveable joints** are a type of joint in the human body characterised by a joint cavity containing synovial fluid, which allows for a wide range of motion. These joints are crucial for enabling activities like walking, running, and grasping. They are mostly found in the limbs, facilitating various movements (for example, shoulder, hip, knee, elbow, wrist, etc.).

*Fig. 5.12: Freely moveable joint*

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### Activity

**Types of Lever-Joints**

In your physics class, you have read about three types of lever—1st class, 2nd class and 3rd class levers. Recall the concept and discuss whether these types of lever are present in our body.

- Synovial joints are further classified into the following types:
  - **(a) Ball and Socket Joints:** They allow movements in all directions (for example, hip, shoulder, etc.)
  - **(b) Hinge Joints:** They allow movements of flexion and extension only(for example, knee, elbow, etc.)

*Fig. 5.13: Types of synovial joints*

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(c) **Pivot Joints:** They allow rotational movement (for example, atlanto-axial joint in neck, radio-ulnar joint in forearm, etc.)

(d) **Gliding Joints:** They allow sliding movements (for example, wrist, ankle, etc.)

(e) **Saddle Joints:** They allow movement in two planes (for example, thumb, etc.)

(f) **Condyloid Joints:** They allow movements in all directions but not rotation (for example, knuckles, etc.)

## MUSCLES

Muscles are tissues in the body that produce movement, maintain posture, and circulate blood by contracting and shortening. The structure of the muscles is shown in Fig. 5.14.

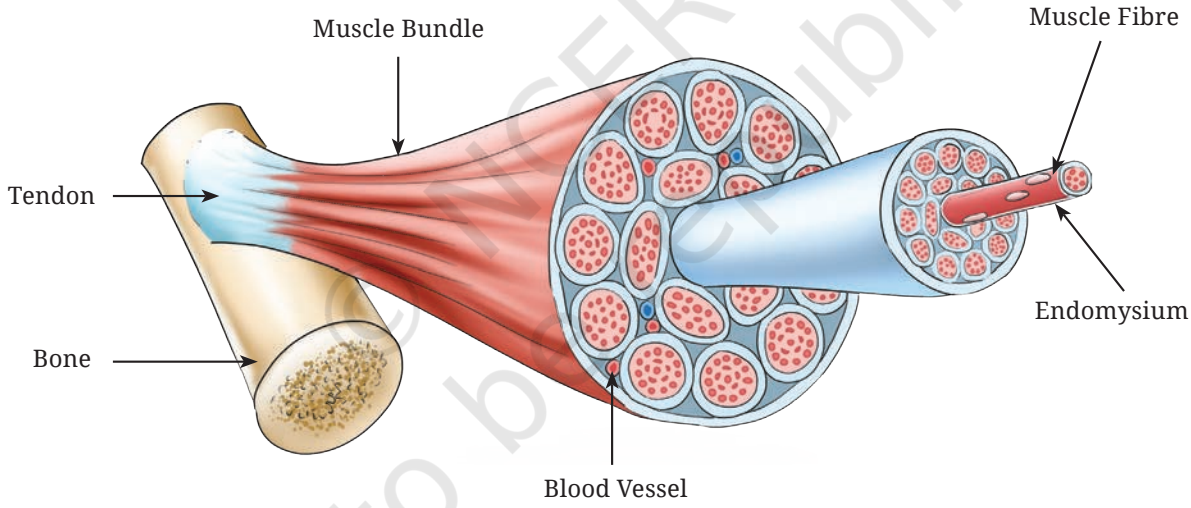


*Fig. 5.14: Structure of muscles*

### Classification of Muscles

There are three main types of muscles— skeletal (voluntary movement), smooth (involuntary functions like digestion), and cardiac (heart function).

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## Activity

Study the image and try to identify and feel the muscles and joints while jumping.

*Fig. 5.15: Functional classification of muscles, bones and joints*

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## Skeletal Muscles

These types of muscles are attached to bones. They allow movement and maintain body posture. They are long, cylindrical, multinucleated, and striated in shape. Since they consciously control body parts' movement, they are also called voluntary muscles (for example, biceps, quadriceps, deltoids, etc.).

### LET US RECALL

There are 206 bones in the human body but it is not only the bones which ensure our body movement. Recall plank and other exercises from the previous classes, and how nearly 639 muslces in the human body help in performing various actions. Try to jump, hop, and leap for a few minutes; then when you stretch, the sensation in your limbs is actually originating in the muscles.

Can you help your parents and peers learn the names and know the locations of some muscles?

## Smooth Muscles

This type of muscles are found in the walls of hollow internal organs of the human body, like the stomach, blood vessels, intestines, etc. They are spindle-shaped, single-nucleus and non-striated. They are primarily controlled by the Autonomic Nervous System (ANS) and regulate involuntary functions, such as iris of the eye, heart rate, digestion, and blood pressure of the human body.

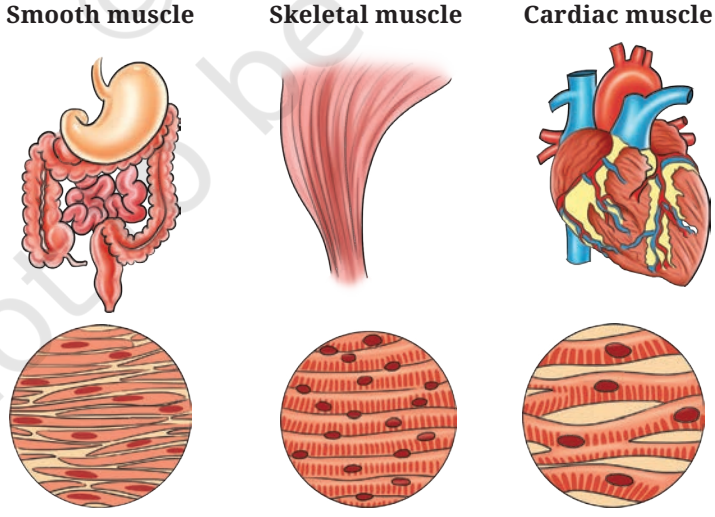


*Fig. 5.16: Classification of muscles*

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**DID YOU KNOW?**

How are different skeletal muscles in the body named?

In previous grades, we've read about different muscles. Let us recall and associate them with the following:

- **Shape**: Deltoid (triangular), Quadratus (square), Rhomboid (diamond-shaped), Teres (round), Gracilis (slender), Rectus (straight), and Lumbrical (worm-like)
- **Size**: Major, Minor, Longus (long), Brevis (short), Latissimus (broadest), and Longissimus (longest)
- **Number of heads or bellies**: Biceps (two heads), Triceps (three heads), Quadriceps (four heads), and Digastric (two bellies)
- **Depth**: Superficialis (superficial), Profundus (deep), Externus/externi (external), and Internus/Interni (internal)
- **Attachment**: Sternocleidomastoid— from one bone to another bone (from sternum and clavicle to mastoid)
- **Position**: Anterior, Posterior, Medial, Lateral, Superior, Inferior, Supra-Interosseus, Infra-Interosseus (between bones), Dorsi (of the back), Abdominis (of the abdomen), Pectoralis (of the chest), and Brachii (of the arm), Femoris (of the thigh), Oris (of the mouth), and Oculi (of the eye)
- **Action**: Extensor, Flexor, Abductor, Adductor, Levator, Depressor, Supinator, Pronator, Constrictor, and Dilator

### Cardiac Muscles

Cardiac muscles are a specialised type of muscles found only in the walls of the heart. It forms the thick middle layer of the wall of the heart known as the myocardium. Its structure is branched, striated and has a single central nucleus. These muscles possess autonomic function with self-stimulating properties, enabling heart to pump blood throughout the body continuously till death.

## Factors Influencing Movement

### Complexity of Form

How complicated or simple a movement is can be determined by the complexity of form. Some movements are simple, like walking, while others are more complex, like sporting activities.

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- Joint complexity — Some joints allow simple movement (like the hinge motion of the elbow), while others allow more complex movement (like the ball and socket joint in the shoulder or hip).

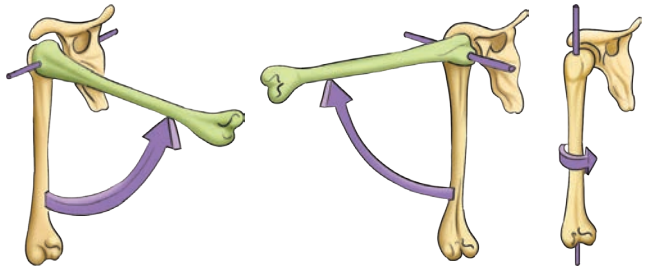

*Fig. 5.17: Bone-to-bone movement*

*Fig. 5.18*

We have often seen, that lifting an object from the ground or table with an improper body mechanics or movement, results in lower back pain. Fig 5.18 helps us understand the dynamics of force application and it's translation.

### Degrees of Freedom

The various directions or ways a joint can move are called the degrees of freedom of that joint. A shoulder joint has more degrees of freedom than an elbow joint.

### Types of joint movement

The different ways in which our joints allow motion are:

- **Translation:** Straight-line movement (for example, sliding your hand across a table).
- **Flexion:** Bending a joint (for example, bending your elbow), when two joint angles are reduced.
- **Abduction and adduction:** Moving a body part away from the midline (abduction) or towards it (adduction).
- **Axial rotation:** Rotating around an axis (for example, turning your head from side to side).
- **Circumduction:** Moving in a circular motion (for example, circling your arm).

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## Force and Range of Contraction

Muscles can generate more force (strength) and allow more range of motion.

### Force, strength and power

- Force is the push or pull that muscles create.
- Strength is how much force a muscle can produce to overcome resistance.
- Power is strength combined with speed (like sprinting or jumping) and may also be known as explosive strength.

### Actions of muscles

Muscles work in pairs and groups to create movement. They can act in different ways:

- **Isometric:** The muscle contracts but does not change length (like holding a plank or pushing against a wall).
- **Isotonic:** The muscle changes length while overcoming a resistance (like lifting weights or throwing an object).
- **Concentric:** The muscle shortens (for example, while bending the elbow, the biceps shortens).
- **Eccentric:** The muscle lengthens under control (for example, while straightening the elbow, biceps lengthen).
- **Isokinetic:** The muscle changes length at a constant speed, usually with special equipment (like an isokinetic dynamometer).

We have practised kicking the ball from Grades 3 to 8 and we also tried to develop expertise in sending the grounded or lofted ball to desired places as shown in Fig. 5.19. The key principle of success in this skill is the force applied by the muscles and the angle of the kick.

When a soccer ball is kicked, it moves through the air.

The displacement ($d$) is how far the ball is from where it started.

Displacement has two parts:

$x$ = how far the ball moves forward (horizontal)

$y$ = how high the ball goes (vertical)

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The ball is kicked with an initial velocity ($v$) at an angle $\theta$ to the ground.

The ball moves forward and upward at the same time, and together these movements determine its path through the air (Fig. 5.19).

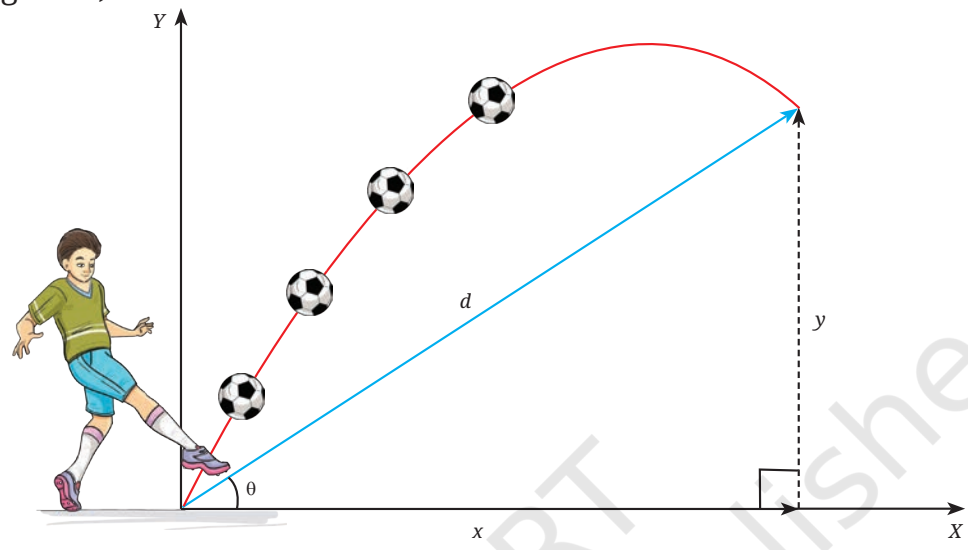


*Fig. 5.19: Path of the ball through the air*

## Exercises

1. In the Preparatory and Middle Stages, you practised different physical activities, including warm-up and cool-down exercises. List five activities that help improve the mobility and function of specific joints.
2. Perform heel raises in both a standing position and a mid-squat position. Try to feel the difference in tension in your calf muscles and identify the muscles involved.
3. Observe the movements while kicking and throwing a ball. Identify and list the joints and muscles that contribute to each movement.

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Chapter 6

# Cardiorespiratory System

*In this chapter, let us understand what changes occur in our body and which systems are involved in the change in breathing and pulse rate.*

*Let us measure the breathing and pulse rate of students in the classroom, as you have learned in Grade 8 during your Physical Education and Well-being period. Record it in your notebook as a baseline breathing and pulse rate. Now, perform jumping jacks for 2 minutes and measure your breathing and pulse rate again and note it down. After 3 minutes of relaxation, measure your breathing and pulse rate again and then run for 4 minutes. Record the breathing and pulse rate separately for each activity in your notebook. Measure it again after 3 minutes. You will notice changes in the baseline breathing and pulse rate after each activity and after rest. These changes occur due to the adaptations that take place in your body.*

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## Activity

Running

*Anuloma-viloma*

| Activity | Breathing Rate (Breaths/Min) | Pulse Rate |
|---|---|---|
| Jogging | | |
| Running (for 3 minutes) | | |
| Jumping jacks (for 2 minutes) | | |
| *Anuloma-viloma* | | |

Jumping jack

Jogging

## Breathing and Respiration

**Breathing** (also called ventilation) is the physical act of inhaling oxygen and exhaling carbon dioxide. It involves your lungs, chest muscles, and diaphragm. For example, when you take a deep breath before running, that's breathing.

**Respiration**, on the other hand, happens at the cellular level. It is the chemical process in your cells where oxygen is used to release energy from food, producing carbon dioxide and water as waste products. This energy fuels your muscles during exercise.

While performing vigorous activities like running or jumping, our breathing becomes faster and deeper. Our body tries to take in more oxygen for cellular respiration, so that muscles can keep working.

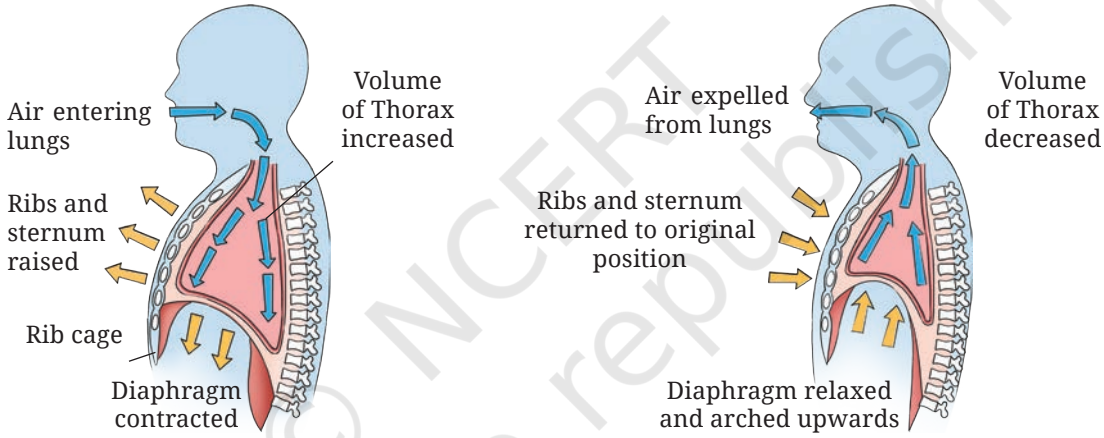


*Fig. 6.1: Mechanism of breathing*

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### Activity

Galen, a Roman and Greek physician, surgeon, and philosopher said "to me it does not seem that all movement is exercise, but only when it is vigorous... The criterion of vigorousness is change of respiration; those movements that do not alter the respiration are not called exercise... The uses of exercise, I think are two-fold, one for the evacuation of the excrements, the other for the production of good condition of the firm parts of the body."

After reading the above paragraph, the teacher divided the students into two groups— one in favour and another against, and asked them to debate on the topic:

Do you agree that only vigorous activity is real exercise?

For normal, quiet breathing, the **diaphragm** does most of the work, and the **intercostal** muscles also assist. When you breathe in (inspiration), the diaphragm contracts and moves downward, making the chest cavity larger and allowing the lungs to expand. When you breathe out (expiration), the diaphragm relaxes.

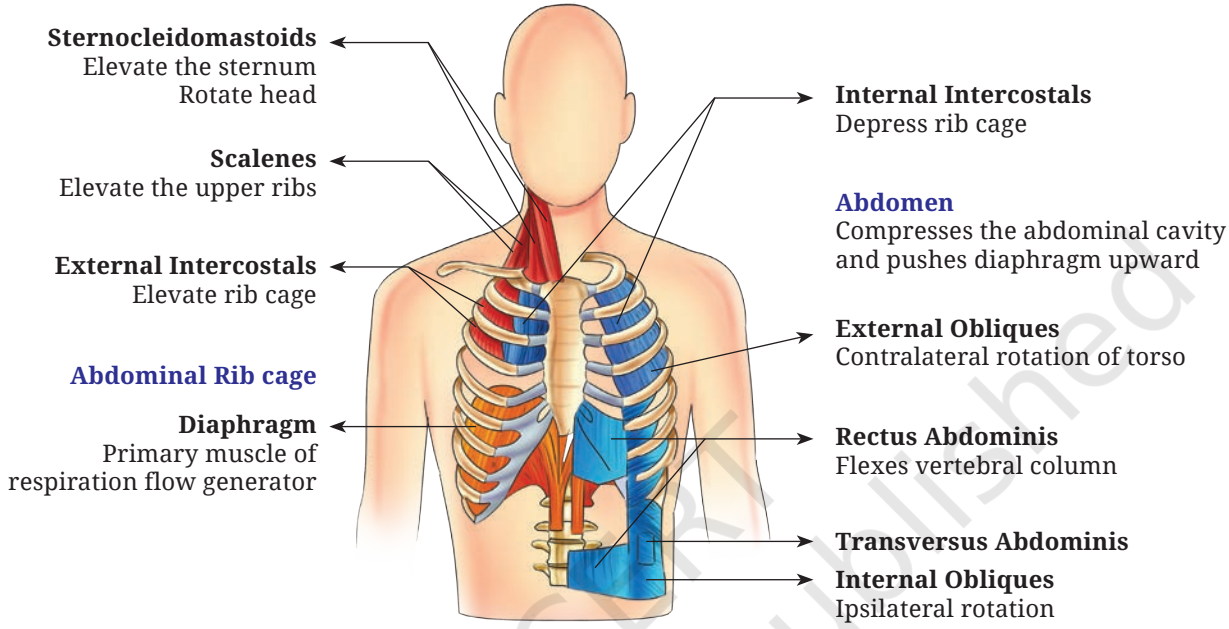


*Fig. 6.2: Muscles used for breathing*

The natural spring-like recoil of the lungs, chest wall, and abdominal structures squeezes the lungs, pushing air out.

During heavy breathing, these natural elastic forces are not strong enough for quick exhalation. In this case, the **abdominal muscles** help by squeezing the abdominal organs upward against the diaphragm, forcing more air out of the lungs. Respiration can be classified into the following types:

## External Respiration (Gas Exchange in Lungs)

Once air reaches the alveoli in the lungs, oxygen ($O_2$) moves from the alveoli into the blood, and carbon dioxide ($CO_2$) moves from the blood into the alveoli to be exhaled. This exchange happens because gases move from areas of higher concentration to lower concentration (diffusion).

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### Internal Respiration (Gas Exchange in Tissues)

As blood circulates through the body, oxygen moves from the blood into the body's cells, and carbon dioxide moves from the cells into the blood.

## Cellular Respiration

Inside each cell, oxygen is used in the mitochondria to break down glucose and release energy in the form of ATP (adenosine triphosphate). Carbon dioxide and water are produced as waste products. This is the final step that actually powers muscle movement, nerve function, and all body activities. This energy is stored in the form of ATP (adenosine triphosphate), which is used for performing all the activities of the cell.

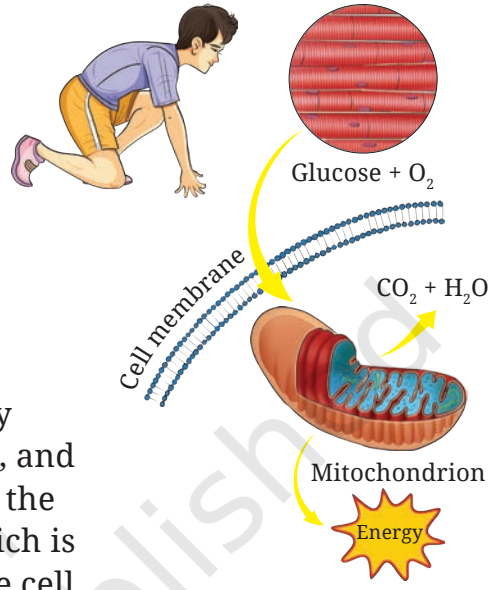


*Fig. 6.3: Cellular respiration*

## Structure and Function of Heart

The human heart works like two pumps. The right side takes in blood from the rest of the body and sends it to the lungs, while the left side

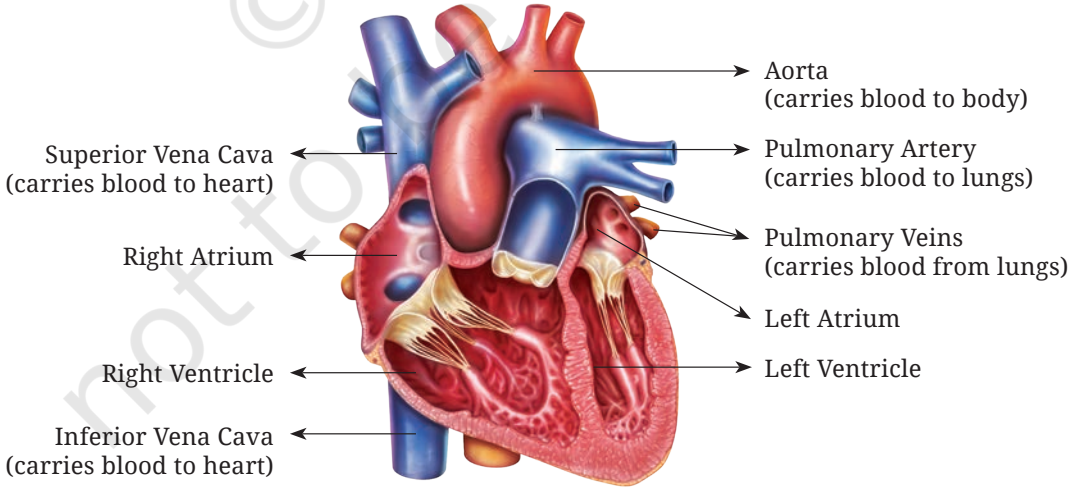


*Fig. 6.4: Structure of the heart*

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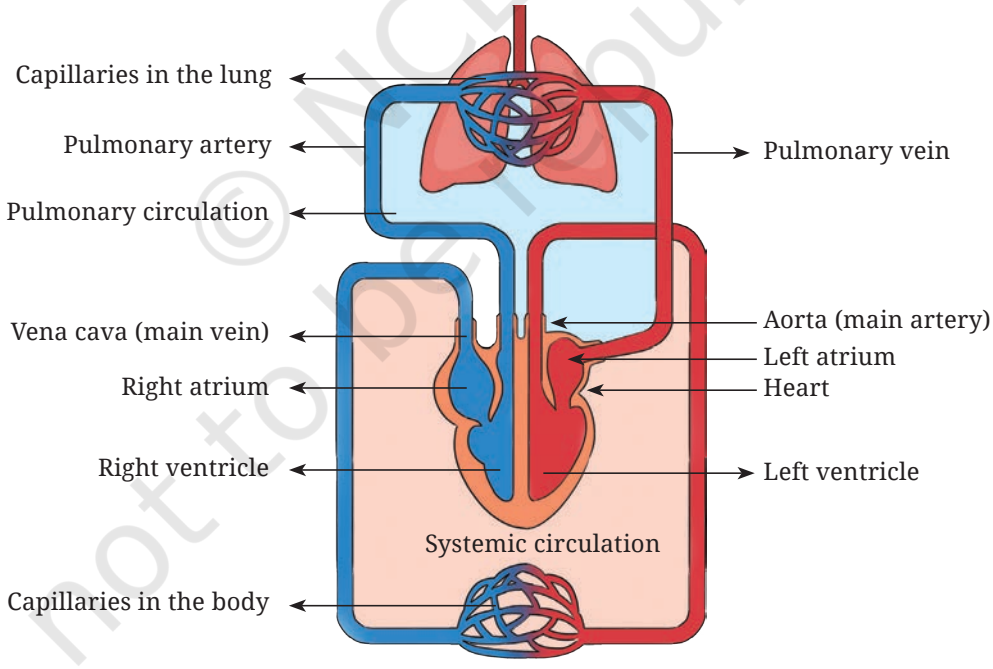
takes oxygen-rich blood from the lungs and sends it back to the body. Each side has two parts— an atrium and a ventricle. The atria act as entryways and help fill the ventricles with blood. Then, the ventricles squeeze, pushing blood out with enough pressure to move it through the body. The heart also has a special system that controls its steady beat and sends signals to make the heart muscles work together.

The function of the circulatory system is to meet the needs of the body's tissues. It transports nutrients to them, removes waste products, carries hormones to different parts of the body, and helps maintain balanced conditions in the fluids present in the tissue so that cells can survive and work effectively.

## Physical Characteristics of Circulation

Humans have a double circulatory system, meaning blood passes through the heart twice during one complete trip around the body. This ensures that oxygen-rich blood (oxygenated) is separated from oxygen-deficient blood (deoxygenated) and reaches the tissues efficiently. The circulatory system is divided into two main parts:




Red: Oxygen-rich blood
Blue: Oxygen-deficient blood

*Fig. 6.5: Circulation*

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### 1. Pulmonary Circulation

- The right side of the heart pumps oxygen-deficient blood to the lungs.
- In the lungs, carbon dioxide is removed and oxygen is added.
- The oxygen-rich blood returns to the left side of the heart.

### 2. Systemic Circulation (also called peripheral circulation)

- The left side of the heart pumps oxygen-rich blood to all the body's tissues.
- Cells use oxygen and produce carbon dioxide as waste.
- Oxygen-deficient blood flows back to the right side of the heart.

The main functional parts of circulation are:

- **Arteries:** They carry blood under high pressure from the heart to the tissues. They have strong walls and blood moves through them quickly.
- **Arterioles:** They are the smallest branches of the arteries. They control how much blood goes into the capillaries by tightening (constricting) or relaxing (dilating) their muscular walls, depending on what the tissues need.

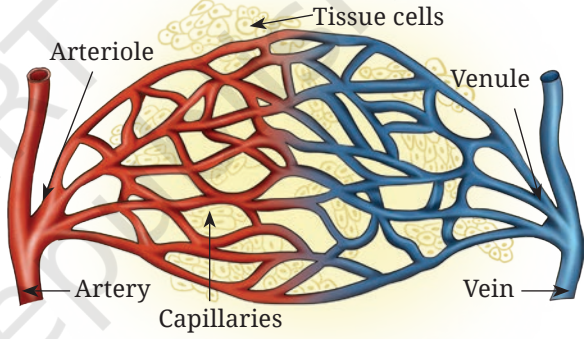


*Fig. 6.6: Blood vessels*

- **Capillaries:** They are tiny blood vessels where the exchange of nutrients, waste products, gases, and other substances happens between the blood and the fluid around the cells. They have very thin walls that allow small molecules to pass through easily.
- **Venules:** They are small vessels that collect blood from the capillaries and join together to form larger veins.
- **Veins:** They carry blood back to the heart. They have thin walls, low pressure, and act as storage areas (reservoirs) for blood at the same time allowing blood to flow quickly.

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## Circulation is a Complete Circuit

When the left side of the heart contracts, it pumps blood into the systemic circulation through the aorta. The aorta branches into smaller arteries, then into arterioles, and finally into capillaries. Each heartbeat causes blood vessels to expand, because they can stretch or are distensible. When the heart relaxes, the vessels spring back (recoil), keeping blood flowing to the tissues even between beats.

Blood leaving the tissues flows into small veins called venules, which join together to form larger veins. These veins carry the blood back to the right side of the heart.

The right side of the heart then pumps the blood into the pulmonary artery, which branches into smaller arteries, arterioles, and capillaries in the lungs. Here, oxygen is taken into the blood and carbon dioxide is removed. The blood then flows from the lung capillaries into venules, then into larger veins, and finally into the left atrium and left ventricle. From there, it is pumped again into the systemic circulation, completing the circuit.

## Sound of the Heart

The normal sound of the heart is a 'lub-dub' rhythm, caused by the closing of the heart's four valves in sequence. The 'lub' is the sound of the mitral and tricuspid valves closing, and the 'dub' is the sound of the aortic and pulmonary valves closing. An abnormal sound, called a heart murmur, can occur from turbulent blood flow, which can be caused by a leaky or stiff valve or other heart problems.

**Lub (S1):** The first heart sound, created by the closing of the mitral and tricuspid valves as the heart's ventricles begin to contract.

**Dub (S2):** The second heart sound, caused by the closing of the aortic and pulmonary valves as the ventricles finish contracting and relax.

**Lub-dub:** The regular, repeating pattern doctors listen for when checking a person's heart health.

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**DID YOU KNOW?**

- The autonomic nervous system has two main parts. The sympathetic nervous system plays the most important role in controlling blood circulation, while the parasympathetic nervous system helps regulate the function of the heart.
- A change in blood flow in any part of the circulation causes a change in other body tissues, which means whenever we do exercises such as the leg press, the blood flow is much more in the lower body tissues as compared to the upper body.
- Cardiac output is the amount of blood the heart pumps into the aorta every minute. It is also the amount of blood that flows through the body's circulation, carrying oxygen, nutrients, and other substances to the tissues and removing waste products.
- In an average adult, the cardiac output is about 5 litres per minute. When measured relative to body size (per square metre of body surface area), it is called the cardiac index, which is about 3 litres per minute per square metre.

**Activity**

Use a stethoscope to listen to the sound of your heartbeat. You will hear two sounds — 'Lub' and 'Dub'.

You can perform this activity individually or in groups, either in your school or at a nearby health check-up centre.

## Blood Pressure

Blood pressure, also known as arterial pressure is the pressure of the blood inside the arteries. It is created when the heart pumps blood into the arteries, pushing it against the artery walls. This pressure helps move blood through the whole body so oxygen and nutrients can reach the tissues. It is measured in terms of:

- **Systolic pressure:** It is the pressure when the heart contracts and pushes blood out.
- **Diastolic pressure:** It is the pressure when the heart relaxes between beats.

At the beginning of the chapter, we did activities involving various movements that causes changes in our body. Let us do those movements again and try to understand these changes.

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## Effects of Exercise

Table 1 highlights the immediate and long-term effects of exercise on different parts of the body and compares key body changes at rest and during exercise, showing how the body adjusts to meet the increased demands of physical activity in Table 2.

**Table 1: Effects of exercise on different parts of the body**

| Body Parts | Immediate Effect | Long-term Effect |
|---|---|---|
| Heart | Beats faster, pumps more blood | Larger, stronger, more efficient |
| Lungs | Breathing rate and depth increase | Greater capacity and efficiency |
| Muscles | Use more oxygen, contract more often | Increase in size, strength, and endurance |
| Blood Vessels | Redirect blood to the muscles | More capillaries, better circulation |
| Skin | More blood flow for cooling | Improved temperature regulation |
| Bones and Joints | No major immediate change | Stronger bones, better joint stability |

**Table 2: Comparison of key body changes at rest and during exercise, showing how the body adjusts to meet the increased demands of physical activity**

| Key Body Changes | At Rest | During Exercise | Explanation |
|---|---|---|---|
| Blood Flow to Muscles | Low | Much higher (15–25 times increase) | Muscles need more oxygen and nutrients |
| Heart Rate | ~70 beats/min | 2–3 times faster | To pump blood more quickly |
| Muscle Activity | Low | High | Muscle fibres contract more often and require more energy |
| Muscle Temperature | Normal | Higher | Heat helps muscles contract more efficiently |

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| | | | |
|---|---|---|---|
| Cardiac Output | ~5 L/min | Up to 30 L/min | To send more blood to active tissues |
| Blood Flow to Stomach and Intestines | Normal | Lower | Blood is redirected to muscles |
| Blood Flow to Skin | Low | Higher | To release heat from the body |
| Oxygen Use | Low | Much higher | For energy production in muscles |
| Waste Removal | Low | Higher | To remove carbon dioxide and lactic acid |

**DID YOU KNOW?**

- A normal resting heart rate for adults is 70–80 beats per minute, but trained athletes often have a resting heart rate as low as 40–50 beats per minute! This shows how efficient their hearts become.
- Elite swimmers and divers can have a vital lung capacity almost twice than that of untrained people. This allows them to hold their breath longer and take in more oxygen per breath.
- When you exercise regularly, your body can grow new capillaries in your muscles. This process is called capillarisation and helps improve endurance.
- During intense exercise, your breathing rate can rise from about 12–15 breaths per minute at rest to over 40 breaths per minute.
- The largest artery in the body, the aorta, can pump almost 20–25 litres of blood per minute in elite endurance athletes during maximal exercise!

## Exercises

1. In the Preparatory and Middle stages, you practised different physical activities, including warm-up and cool-down exercises. List five activities that help improve cardiovascular endurance.
2. Measure your heart rate while stair climbing and cycling. Compare the changes in heart rate and breathing rate for both activities by creating a chart and recording the differences.
3. Do one activity each using your upper body and one using your lower body. Identify and explain the differences in muscle use, tiredness, and heart rate between the two activities.

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Chapter 7

# Growth, Development, and Maturation

*Have you ever noticed that after the same exercise, some of your classmates recover quickly while others take longer to catch their breath? Let us find out why.*

*Perform an activity such as skipping or jogging for one minute at a steady pace. After the activity, observe and record how your body responded — your breathing rate, heart rate, sweating, and muscle fatigue. Compare your responses with your classmates and discuss why different individuals may respond differently to the same activity.*

*In this chapter, you will study how differences in growth, maturation, and development affect strength, endurance, coordination, and recovery, and why these changes occur at different rates for each person.*

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## Growth

The changes that occur in the size and composition of the body or in the dimensions of a specific body part are termed as growth. For example, as children, your bones lengthen and muscles grow, making you taller and heavier. Growth is the most significant biological activity in the first two decades of life.

*Fig. 7.1*

### Development

Development is not limited to size or the body composition; it can be both behavioural and biological. Such as the development of motor skills, or learning teamwork or controlling emotions during sports. Development is shaped not only by your biology but also by your experiences.

### Maturation

Maturation is the progression of the body towards adulthood. It can happen at different ages, rates and times in almost all individuals. Even within one person, all systems do not mature at the same time—for example, our skeletal system matures much later than our reproductive system.

Table 7.1 below outlines the differences among growth, development and maturation.

**Table 7.1: Different aspects of growth, development, and maturation**

| Aspect | Growth | Development | Maturation |
|---|---|---|---|
| Meaning | Structural and physical change; increase in size, height, weight and length | Overall change in shape, structure, functioning, skills, and behaviour | Progression of the body towards adulthood and full functional capacity |
| Nature of Change | Quantitative (measurable changes in size or weight) | Qualitative (improvement in function, skills, and behaviour) | Qualitative and biological (timing of changes in body systems, for example, puberty, and skeletal maturity) |
| Relation | Part of development, the quantitative aspect of development | Wider term; it includes growth and other qualitative changes | Supports both growth and development by determining when body systems are ready |
| Continuity | Stops after maturity is attained | Throughout life | Until full maturity of systems is achieved (different systems mature at different times) |

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| | | | |
|---|---|---|---|
| Measurement | Measurable (height, weight, and organ size) | Hard to measure; assessed through skills, behaviour, and complexity | Indicated by biological markers (puberty, skeletal maturity, and hormonal changes) |
| Process | Cellular (multiplication of cells, and increase in tissue) | Organisational (better coordination, improved skills, and behaviour) | Biological and functional readiness (for example, reproductive maturity, and bone growth completion) |
| Dependency | Growth may or may not bring development | Development is possible even without growth | Maturation sets the pace for growth and development |
| Example | Increase in height and weight | Learning to walk, read, or play sports | Onset of puberty and closure of growth plates in bones |

**Table 7.2: Factors influencing growth, development, and maturation**

| Factor | Effect on Growth (Quantitative) | Effect on Development (Qualitative) | Effect on Maturation (Qualitative) |
|---|---|---|---|
| Genetic or Hereditary | Determines height, body size, and skeletal proportions | Influences motor skills, and cognitive ability potential | Regulates the timing of puberty and system-specific maturation |
| Nutrition | Adequate nutrients increase body size, muscle mass, and bone density | Balanced diet supports brain function, learning, and motor skill development | Deficiency or adequacy affects onset and pace of puberty |
| Hormones | Growth hormones and thyroid hormones regulate cell multiplication and bone growth | Hormonal balance aids proper organ development and function | Sex hormones (estrogen and testosterone) trigger reproductive maturity |

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| | | | |
|---|---|---|---|
| Physical Activity and Exercise | Stimulates bone density, muscle hypertrophy, and cardiovascular growth | Improves motor coordination, strength, flexibility, and skill acquisition | Enhances readiness of musculoskeletal and neuromuscular systems |
| Health and Medical Care | Illness or chronic disease may stunt physical growth | Good health supports learning, concentration, and psychosocial development | Preventive care ensures normal and timely biological maturation |
| Environment | Pollution or toxins may restrict body growth | Safe surroundings encourage exploration and learning | Poor conditions may delay or disrupt maturation processes |
| Psychological and Emotional Domain | Stress can reduce growth hormone secretion | Emotional support improves confidence, behaviour, and cognitive development | Stability aids smooth transition through adolescence and puberty |
| Socio-economic Domain | Access to food and healthcare improves body size and growth | Education and facilities enhance social and intellectual development | Higher socio-economic status often linked with earlier or normal maturation |
| Cultural and Lifestyle | Diet and lifestyle habits influence growth rate | Traditions shape behavior, learning, and skill sets | Lifestyle choices (sleep, rest, and activity) affect hormonal cycles and maturation speed |

**Does this mean performance changes in sports are always because of training?**

Not necessarily. Physical performance naturally improves as children grow, develop, and mature; therefore teachers must observe these changes carefully. If a young athlete suddenly gets faster or stronger, it could be because of training, or because their body is going through a natural growth spurt. Hence, thorough understanding of these processes is very important.

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We often use terms like children, adolescents, youth, and young athletes. These are sometimes used interchangeably because it's hard to put them in exact age ranges. For example:

- **Children—** students under 12 years of age.
- **Adolescence—** This period begins with puberty, which can start early or late, therefore there is no fixed age.
- **Youth—** often used as a global term for anyone under 19 years.
- **Young athletes—** A similar age range of students as that of youth, but with a focus on sports participation.

## DID YOU KNOW?

**Growth Plates** — Bone growth plates are areas of cartilage near the ends of children's and teenagers' long bones where new bone is added, allowing bones to grow in length and width. They are also called physes and are made of flexible cartilage, but they harden into solid bone (close) after puberty, which marks the end of bone growth. Growth plates are weaker than surrounding ligaments and tendons, making them susceptible to fractures that can affect future bone growth if not properly treated.

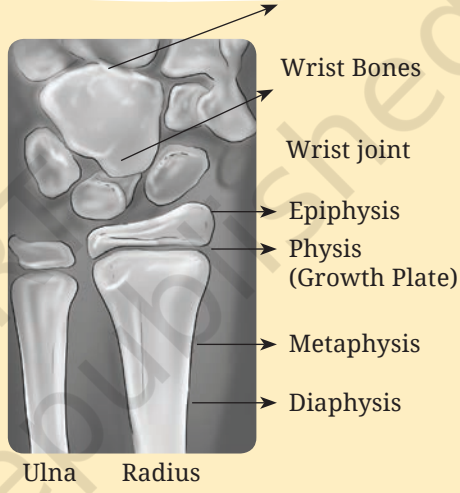

*Fig. 7.2: Parts of a fully grown bone*

**Age Determination—** Growth plates are used to determine the age. The Tanner–Whitehouse 3 (TW3) method is a sports age determination technique that uses an X-ray of the left hand and wrist to assess skeletal maturity.

Vertical Load Bearing Exercises should be restricted at pre-adolescent stage as it affects the epiphyseal growth plate (primary ossification centre) and peak height velocity will be compromised.

## TRIVIA

*Amla Navamī*, also known as *Akṣhaya Navamī*, is a festival celebrated on the ninth day of the bright fortnight in the month of *Kartik*. It honours the *Amla* (Indian gooseberry) tree, believed to be sacred and symbolic of health and well-being. The *Amla* fruit is rich in vitamins, specifically water-soluble Vitamin C and is believed to boost the immune system, enhance liver function, and support digestion, among other benefits and can be consumed in any form.

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## Activity

### Life Cycle of Bone

Observe your peer group and identify the differences among them related to growth, development, and maturation.

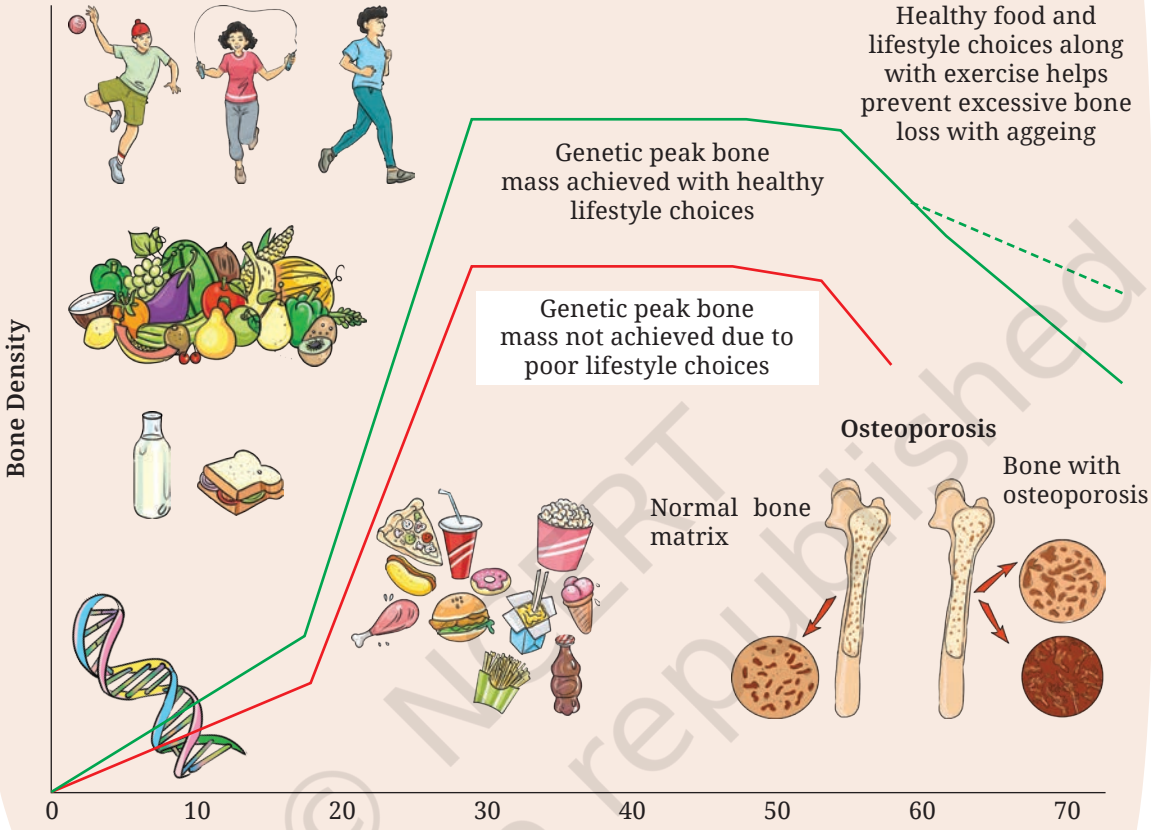


*Fig. 7.3*

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## Exercises

1. Explain how biological development, motor skills, and behavioural development help you, giving one example of each.
2. How are heredity and environment responsible for growth?
3. Two students of the same age have different heights. Explain the difference in terms of growth and maturation.

Chapter 8

# First Aid

*Ma'am, we often get injured while playing. Sometimes we get small cuts, but at other times we feel pain even if there is no bleeding. What should we do in such situations?*

*That is a very good question, Arnav. Not all injuries cause bleeding — some affect the muscles, joints, or bones underneath the skin. These are called soft tissue injuries, and they are very common in sports. When you fall and twist or pivot suddenly, the tissues around your joints — like muscles, tendons or ligaments — may get stretched or torn. This causes pain, swelling, and bruising even without an open wound.*

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*There's a simple and effective method to treat such injuries in the first few hours. It's called the R.I.C.E. principle, which stands for:*

| Aspect | Action | Purpose or benefit |
|---|---|---|
| R – Rest | Stop playing or putting pressure on the injured part. | Prevents further tissue damage and starts healing. |
| I – Ice | Apply ice for 10–15 minutes every 2 hours. | Reduces pain and swelling. Always wrap ice in a cloth. |
| C – Compression | Wrap with an elastic bandage. | Limits swelling and provides support. |
| E – Elevation | Keep the injured limb raised above heart level. | Helps fluid drain away and reduces swelling. |

*Ma'am, you told us about R.I.C.E. I noticed something called PRICE, POLICE and PEACE and LOVE while browsing the Internet. Which one is correct?*

*Good observation, Ishita. R.I.C.E. is the basic version, but sometimes we use an improved method called PRICE — it adds Protection as the first step. For example, if you twist your ankle, stop moving immediately and protect it with a support or brace before applying R.I.C.E.*

*POLICE and PEACE and LOVE are newer methods used during long-term recovery. But for first aid in school or on the playground, PRICE is simple, effective, and easy to remember.*

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## DID YOU KNOW?

**P** — **Protection**

Avoid activities and movements that increase pain during the first few days after injury.

**E** — **Elevation**

Elevate the injured limb higher than the heart as often as possible.

**A** — **Avoid Anti-Inflammatories**

Avoid taking anti-inflammatory medications as they reduce tissue healing. Avoid icing.

**C** — **Compression**

Use elastic bandage or taping to reduce swelling.

**E** — **Education**

Your body knows best. Avoid unnecessary passive treatments and medical investigations and let nature play its role.

**and**

**L** — **Load**

Let pain guide your gradual return to normal activities. Your body will tell you when it's safe to increase the load.

**O** — **Optimism**

Condition your brain for optimal recovery by being confident and positive.

**V** — **Vascularisation**

Choose pain-free cardiovascular activities to increase blood flow to repairing tissues.

**E** — **Exercise**

Restore mobility, strength, and proprioception by adopting an active approach for recovery.

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## DID YOU KNOW?

### Protection

Rather than totally resting the injured area, think more about protecting it from further damage. A short period of rest immediately after an injury is helpful to unload the injured area but total rest should be limited and combined with optimal loading.

### Optimal Loading

Early activity encourages early recovery. Progressive loading of your injury can help promote optimal healing. It can prevent delays in returning to normal that may develop with prolonged rest such as joint and muscle tightness or muscle wasting.

### Ice

Applying ice may help to manage the swelling around your injured muscle or joint and it can help decrease some of the acute pain that you may be experiencing. Icing every few hours for up to 20 minutes at a time is great for the first few days.

### Compression

Applying a compression bandage evenly to the affected area, may help reduce any swelling you may have. You can combine this with ice.

### Elevation

You can elevate the area during short periods of rest, again to help with swelling and reduce the pain. Make sure the injured part is elevated above the level of your heart.

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## Activity

### Identify and Respond

Form small groups in your class. One student will act as an injured player and the others will act as first aiders. Act out the following scenarios in your group:

- A twisted ankle
- A fainting student
- A nosebleed

Use the PRICE method, stay calm, and make sure to call for help when needed. After the activity, discuss with your class — what did you do well and what could you have done better?

The teacher then picked up the school's First Aid Box from their desk and said, now that we have learned how to manage injuries, let us understand the most important part.

## What is First Aid?

First Aid is the immediate care given to a person who has been injured or become suddenly ill before medical help arrives.

It includes simple actions that can sometimes save a life. The purpose of first aid is not to diagnose or fully treat the problem—it is to provide stability and safety until professional medical care is available.

Anyone with basic first aid knowledge can make a difference. In fact, studies show that trained individuals can greatly reduce deaths and disabilities worldwide simply by acting quickly.

## Aims of First Aid

The teacher wrote three big letters on the board: P – P – P and explained,

1. **Preserve Life:** The first aim is to keep the person alive by ensuring they can breathe, their heart is beating, and bleeding is under control.

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*Fig. 8.1: First Aid*

2. **Prevent Worsening:** The second aim is to stop the condition from getting worse — for example, by using the PRICE method for injuries, or by controlling bleeding in case of cuts.
3. **Promote Recovery:** The third aim is to comfort and reassure the injured person, and help them recover until professional help arrives.

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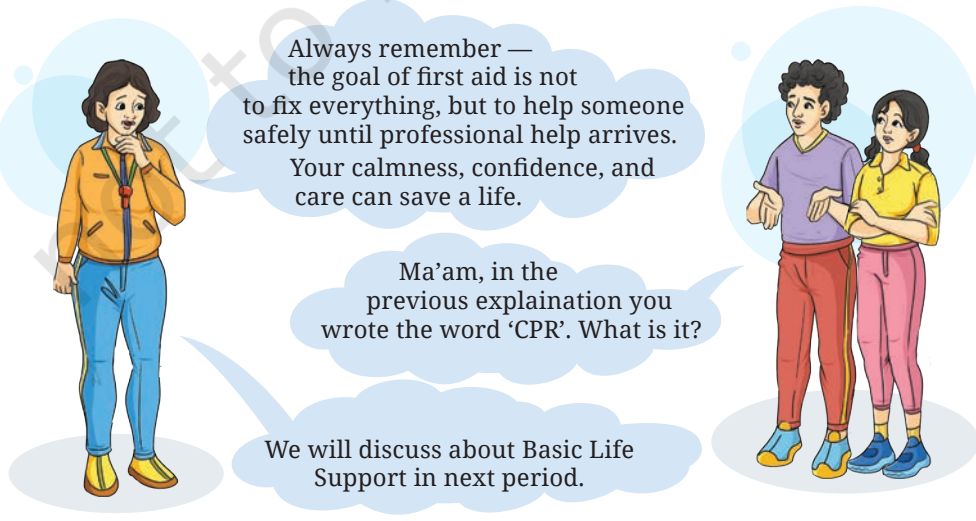
## Golden Rule of First Aid

The following are the golden rules of the first aid which everyone should follow.

| S.No. | Golden Rule | Explanation or Action |
|---|---|---|
| 1. | Stay Calm and Think Clearly | Panic spreads faster than injury. Stay calm, take a deep breath, assess the situation, and think before acting. A clear mind saves lives. |
| 2. | Ensure Safety First | Your safety comes first. Check for danger — like live wires, fire, sharp objects, or traffic — before helping. Never become the second victim. |
| 3. | Call for Help Early | Whether the injuries are serious or common, call for medical help immediately. In India, dial 112 for emergency services. While waiting, begin first aid or CPR if needed. |
| 4. | Give Immediate and Correct First Aid | Follow the 3 Ps of First Aid:<br>• Preserve Life<br>• Prevent Worsening<br>• Promote Recovery<br>Use BLS/CPR for breathing or cardiac emergencies. |
| 5. | Handle With Care | Never move an injured person roughly. If a head, neck, or bone injury is suspected, keep the person still and wait for trained help. |
| 6. | Use What You Have | If a first aid box isn't nearby, use available materials — clean cloth for bleeding, a folded magazine as a splint, or a towel as a sling. Presence of mind is more important than tools. |
| 7. | Stay With the Person | Stay beside the injured person. Talk to them, reassure them, and keep them conscious. Emotional support reduces shock and fear. |

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## Basic Life Support (BLS) and CPR

The next day, during the physical education period, the teacher brought a mannequin and some first aid charts to class. The students were curious.

### Understanding Basic Life Support (BLS) and CPR

BLS means giving immediate help to someone whose heart or breathing has stopped, until professional medical help arrives. It includes CPR (Cardiopulmonary Resuscitation) and the use of an AED (Automated External Defibrillator) if available.

The teacher explained:

One of the most important life-saving skills is Basic Life Support, also called BLS. Sometimes, when a person suddenly collapses, stops breathing, or loses consciousness, what you do in the first few minutes can save their life.

### Aims of BLS and CPR

1. Restore breathing.
2. Maintain blood circulation.
3. Keep oxygen supply to the brain and vital organs.

### The DRSABCD Action Plan

The teacher showed a poster with the letters DRSABCD and explained them step by step:

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D

R

S

A

B

C

D

## Check for Danger

Ensure the area is safe for—

• Yourself • Bystanders • Casualty

## Check for Response

No Response

## Send for help

Call (112) or ask another person to call.

## Open the Airway

Check for airway obstruction. If debris is present, roll the casualty to the recovery position and clear. To open the airway, tilt the head back and lift the chin.

## Check Breathing

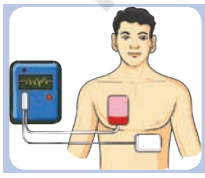
Look – Listen – Feel for 10 seconds

| Not breathing or breathing abnormally | Normal breathing<br>Place in the recovery position and monitor breathing |
|---|---|

## Start CPR

30 Chest Compressions + 2 Breaths

| | Adult (>8 years) | Child (>1 year) | Infant (<1 year) |
|---|---|---|---|
| Pressure | 2 hands | 1 or 2 hands | 2 fingers |
| Depth | 5+ cm | 5 cm | 4 cm |
| Rate | Almost 2 compressions per second (100–120/min) | | |
| Breath | 2 full breaths with head tilt and chin lift | 2 shallow breaths with head tilt and chin lift | 2 puffs with no head tilt with and slight chin lift |



## Attach defibrillator (AED)

Where an AED is available, attach it as soon as possible and follow the instructions. Continue CPR and defibrillation until signs of life resume or medical professionals take over.

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## Activity

### Practising CPR

Form groups in your class. Take turns practising chest compressions on a mannequin. While performing the compressions, say the rhythm aloud:

Push, push, push — 1, 2, 3 ...

Remember to maintain the correct depth and pace with each compression.

### Golden Rules of BLS and CPR

1. Stay calm — panic wastes time.
2. Call for help immediately.
3. Start CPR without delay if the person is unresponsive and not breathing.
4. Never give up until medical help arrives or the person recovers.
5. Always protect yourself — wear gloves if available.

Ma'am, I often get nosebleeds, especially during the summer or when I play outside for a long time. What should I do when that happens?

That's a good question. A nosebleed is quite common among children and athletes. It usually happens when the tiny blood vessels inside the nose burst due to dryness, heat, injury, or too much pressure from blowing the nose. But don't worry — it can be easily managed with proper first aid.

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The teacher then explained step by step:

**Step 1**

Pinch the fleshy part of the nose just below the bone using your thumb and index finger.

**Step 2**

Sit down and lean slightly forward to prevent blood from flowing down the throat.

**Step 3**

Maintain pressure and posture until the bleeding stops.

**Step 4**

Sit and rest for at least 10 minutes.

*Fig. 8.2: How to stop nosebleed*

If the nosebleed does not stop even after 10–15 minutes, or if it happens often, you should see a doctor. Sometimes, frequent nosebleeds happen due to dryness, allergies, or weak blood vessels.

Ma'am, can it happen because of playing too much in the heat?

Yes. Hot, dry air can dry out the lining of the nose, making it fragile. That's why it's important to stay hydrated, avoid picking your nose, and if needed, apply a little petroleum jelly inside the nostrils during very dry weather.

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## Activity

In a group of four to five members, practice the transfer techniques given below and explore when to apply which of the techniques to transfer the injured person. Also, discuss with the teacher about the accuracy of both the transfer and injury.

## Transfer Techniques

Transfer techniques in first aid are methods used to move an injured person safely from one place to another without causing further harm. Before transferring a casualty, it is important to ensure that the area is safe, check the person's condition, and call for medical help. An injured person should not be moved if a spinal or neck injury is suspected, unless there is immediate danger.

There are different transfer techniques depending on the situation. Let us understand those shown in Fig. 8.3.

## Exercises

1. A student fell during a football match and injured their ankle. What immediate First Aid steps should be taken?
2. During a sports event, a player becomes unconscious but is breathing. What should you do?
3. What items should be included in a basic First Aid kit?

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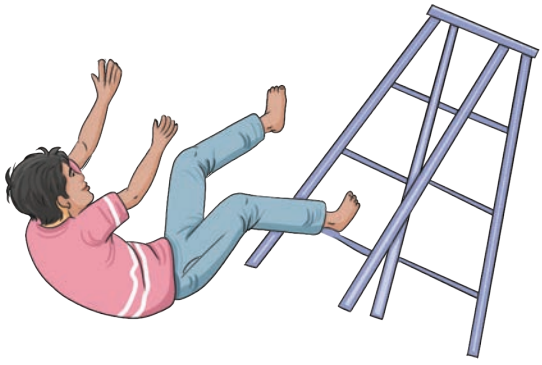
# Rules of First Aid While Moving



Fracture of Spine

Hold the Head

Extremity Lift

Chair Litter Carry

Handed Seat

Shirt Drag

Blanket Drag

Neck Drag

*Fig. 8.3: Transfer Techniques*

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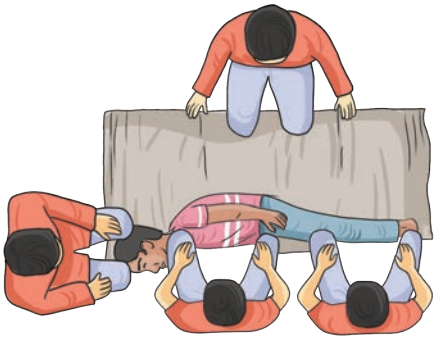
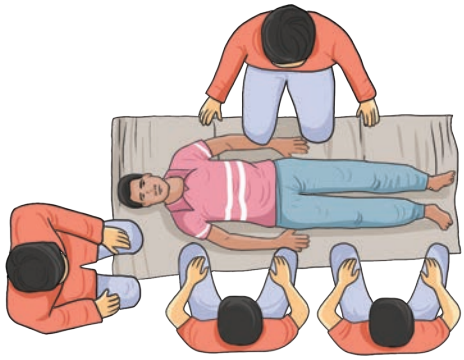
## *an Injured Victim*

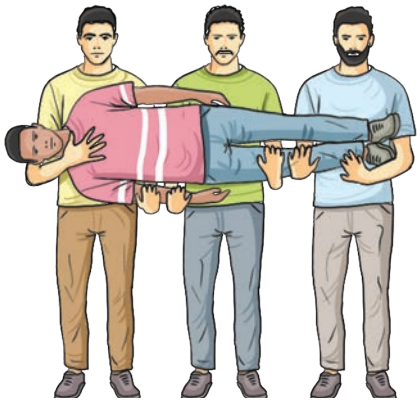


Roll Victim to Side and Place Blanket

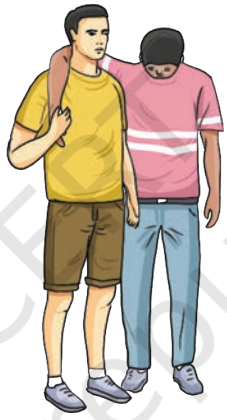


Lay Victim Flat on the Blanket

Move Victim by Holding the corners of the Blanket



Flat Lift and Carry



Walking Assist

Lift and Carry

Fireman's Carry

Pick-a-back

Arm Lift

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## Check Your Progress

### Answer in brief

1. Compare voluntary and involuntary muscles with examples.
2. What happens to muscles when you exercise regularly?
3. What changes occur in breathing and pulse rate when you run compared to when you rest?
4. Design a circuit training to improve cardiorespiratory fitness.
5. "Growth stops after a certain age, but development continues throughout life." Explain the statement.
6. How can lack of sleep affect growth and development?

### Answer the following in detail

1. Explain how bones and muscles work together to produce movement.
2. What happens to muscles when you exercise regularly?
3. How does regular physical activity influence growth during adolescence?
4. Explain how emotional development changes during teenage years.
5. Why is it important to stay calm while giving first aid?
6. Design a simple awareness poster on the importance of first aid in daily life.
7. Explain how the heart and lungs work together during physical activity.
8. Why is cardiorespiratory endurance important for overall health?

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UNIT

3

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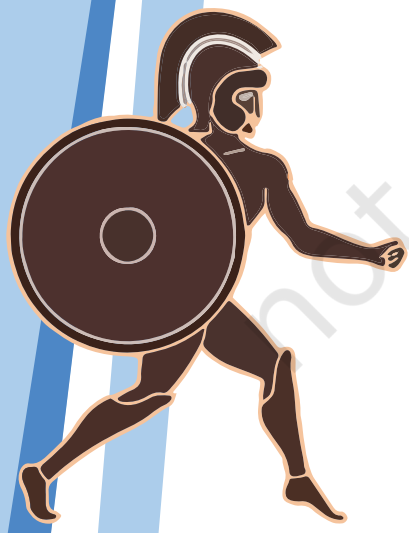
# Olympism

*This unit explores the philosophy and values of the Olympic Movement, inculcating the role of sports in promoting peace, unity, and personal excellence. Olympism is presented as a philosophy of life that combines sport, culture, and education to foster harmony and cooperation among individuals and nations. The unit highlights the core Olympic values of excellence, friendship, and respect, along with educational values like joy of effort, fair play, and balance between body, mind, and willpower. This unit traces the history of the Olympic Games, from their ancient origins in Greece to the modern revival by Pierre de Coubertin in 1896. It discusses the evolution of the Games, including the inclusion of women, the introduction of the Winter Olympics, Paralympics, and Youth Olympics, and their role in promoting equality and inclusion. Students are encouraged to reflect on the values of the Olympic Movement and how they can be applied in their own lives to foster personal growth and social harmony. Symbols like the Olympic flag, rings, motto, and anthem are explored, highlighting their significance in uniting athletes and nations. The unit emphasises the importance of participation over winning, as expressed in the Olympic Creed, and encourages students to embrace the spirit of fair play, mutual respect, and global friendship. Through engaging activities, students learn how sports can transcend boundaries and contribute to a more peaceful and inclusive world.*



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Chapter 9

# Olympic Values

*Imagine you are standing in a packed stadium. Thousands of people are cheering, the Olympic flame is burning brightly, and athletes from different countries are marching together in a colourful parade. They speak different languages, belong to different cultures, and compete in different sports. Yet, in that moment, they are all united under one flag— the Olympic flag.*

*A memorable example is the 1936 Olympics, when Jesse Owens, an African-American sprinter, won four gold medals despite facing racial discrimination both at home and abroad. His friendship with German athlete Luz Long, who supported him during the long jump, became a symbol of mutual respect, friendship, and fairness. This story reminds us that the Olympics are about more than winning medals, they embody values that bring people together.*

The word 'Olympism' may sound big, but its meaning is simple and inspiring. Olympism is a philosophy of life. It teaches us to balance our body, mind, and willpower. It is not only about sports but also about how we live every day. Olympism brings together sport, culture, and education to make the world more peaceful and united.

## Philosophy and Goal of Olympism

Olympism views sport as an enabler of a balanced development of body, mind, and character. It promotes physical, mental, social, and emotional growth while upholding the dignity of every individual and ensuring equal participation without discrimination. More than winning medals, Olympism teaches values such as joy of effort, fair play,

**Activity**

Try to recall instances when two rival countries united during sports competitions. Have sports ever helped you bond with new friends?

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respect, friendship, and solidarity. By combining sport with culture and education, it encourages cooperation, harmony, and responsible citizenship.

### TRIVIA

- The Olympic flag, with its five rings, was first introduced in 1914 by Pierre de Coubertin. These rings symbolise the five continents and the coming together of athletes from around the world.
- The Olympic motto today is "Faster, Higher, Stronger—Together" (*Citius*, *Altius*, *Fortius—Communiter*)
- The word 'Olympism' first appeared in the 1908 edition of the olympic charter, defined by Pierre de Coubertin as "a life philosophy that balances the qualities of body, will, and mind."
- The Olympic Charter is revised regularly to reflect global values. The latest edition (2025) includes a strong focus on sustainability and equality.

## Sport as a Force for Peace and Unity

The Olympic Movement spans across continents and includes athletes, coaches, technical officials and communities who believe in friendship, solidarity, and fair play. A powerful moment occurred when athletes from North and South Korea marched together under one flag in the 2018 Winter Olympic. This act sent a strong message of peace and understanding, showing how sport can rise above political boundaries.

### LET US FIND OUT

Why do you think the place where participating athletes of the Olympics, Commonwealth Games, Asian Games, National Games, etc., stay is called the Games Village?

### LET US REFLECT

- How does the idea of Olympism go beyond sport?
- Can you recall a situation in which effort was more important to you than winning?

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## LET US DISCUSS

Pierre de Coubertin, founder of the modern Olympics, believed that sport is the fourth branch of education, along with science, art, and morality.

What does this mean? How does sport educate us differently from classroom subjects?

## Core Olympic Values

### Excellence

Excellence means giving your best effort and continuously improving, not just winning. It inspires us to set goals and persist through challenges.

Neeraj Chopra, India's first Olympic gold medalist in athletics (Tokyo 2020), exemplifies this value. Despite injuries, his disciplined training and self-belief led to his historic achievement. Similarly, Michael Phelps' 23 Olympic gold medals demonstrate that excellence requires sustained hard work and resilience.

Excellence applies beyond sports. A student shows excellence by completing work with full effort and honesty, always seeking to learn and improve.

**Olympism is a philosophy of life, which places sport at the service of humankind.**

*Fig. 9.1: Philosophy of Olympism*

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## Friendship

True friendship is founded on trust, respect, and kindness. In school or the community, it involves including others, helping those in need, and celebrating successes together. Many Olympians have spoken about the friendships they forged with fellow athletes worldwide. For example, the story of lifelong friends Jesse Owens and Luz Long that we read in the introduction. Their relationship serves as a lasting lesson in humanity.

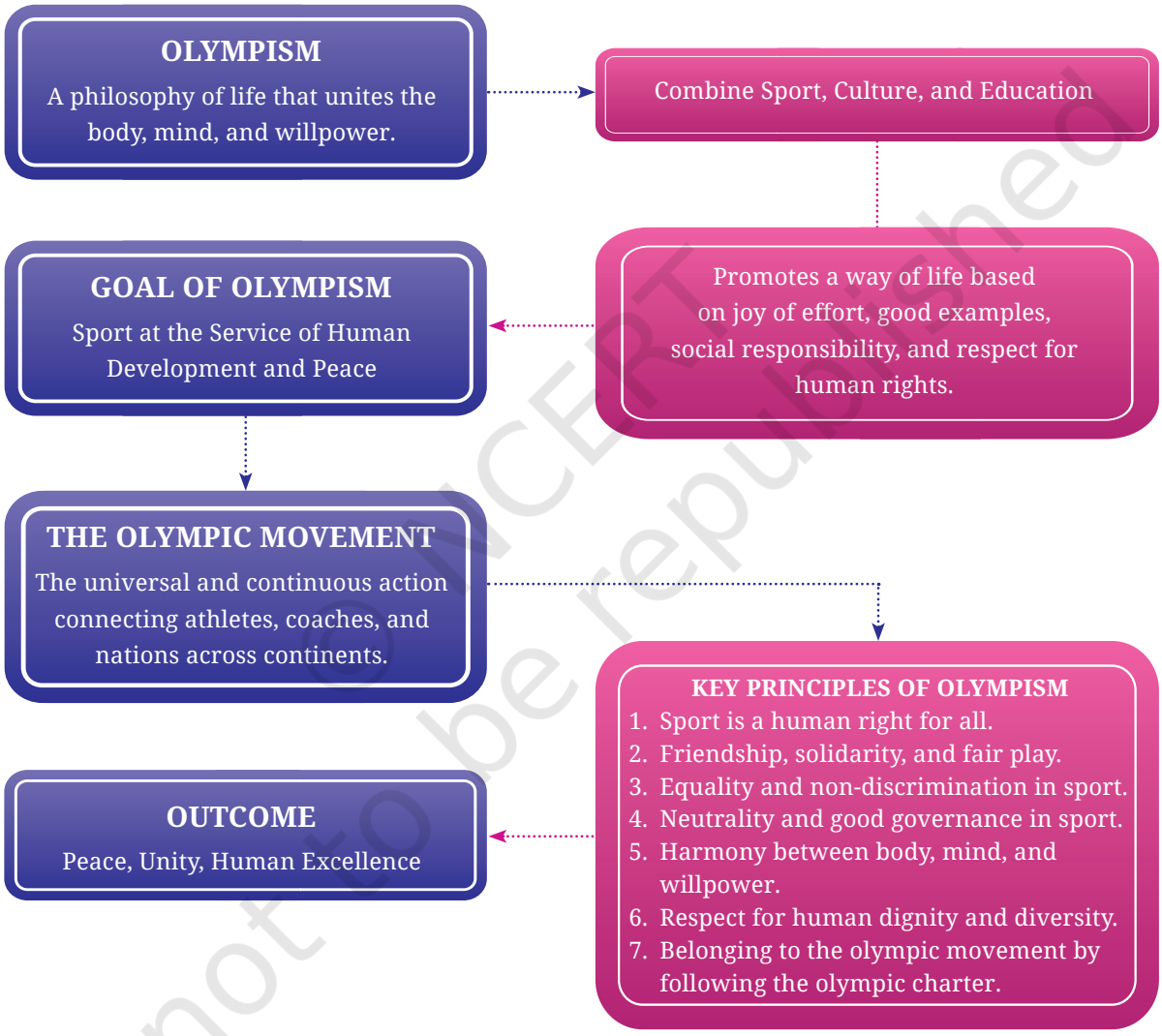


*Fig. 9.2: Essence of Olympism*

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### Respect

Respect means valuing yourself, others, and the rules, whether in sports or daily life. Many Indian athletes, like Sachin Tendulkar, touch the ground before entering the field as an act of gratitude and humility. In competition, respect is shown when athletes accept a referee's decision, shake hands with opponents, or acknowledge their competitors' efforts. Beyond sports, respect means listening to others, accepting diversity, following rules, and caring for our environment and resources.

**LET US SHARE**

Your favourite sportstar's act of excellence, friendship, and respect.

## Olympic Educational Values

In addition to the three main values of excellence, friendship, and respect, the Olympic Movement also promotes a set of educational values that help learners grow as complete individuals. These values connect sports with education and life.

### Joy of Effort

The joy of effort means finding happiness in giving your best, whether you win or lose. It encourages us to enjoy the process of learning and playing, not just the result. Each time we work hard and improve ourselves, we experience true joy.

### Fair Play

Fair play means playing honestly, following the rules, and showing respect to teammates, opponents, and officials. It teaches honesty, justice, and equality in both sport and life.

**DID YOU KNOW?**

- According to the Olympic Charter, sport is a human right. Every individual should have access to participate in any physical activity without discrimination.
- The Olympic flame is first lit in Olympia, Greece, and then carried to the host city through a torch relay.

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## Balance of Body, Mind, and Willpower

A balance of body, mind, and willpower teaches the importance of overall well-being. A healthy balance of physical fitness, mental strength, and emotional stability helps us perform at our best. It connects directly with India's traditional concepts of holistic health in Yoga and *Pañchakośha* (body—mind—spirit harmony). Abhinav Bindra, India's first individual Olympic gold medallist in shooting, practiced meditation and mental training as seriously as his shooting practice. His calm focus became the key to his success at the 2008 Beijing Olympics.

**LET US RECALL**

Think of a moment when you experienced one of these values—joy of effort, fair play, pursuit of excellence, or balance. What activity were you doing? What did you learn about yourself?

### Activity

**Olympic Values Tree**

- Draw a large tree on a classroom board or chart.
- Label the trunk 'Olympism'.
- On the branches, write values like Excellence, Friendship, Respect, Joy of Effort, and Fair Play.
- Each student will add a leaf to the branches with their personal experiences of these values.

## Exercises

1. What do the five rings on the Olympic flag symbolise?
2. What is the current Olympic motto?
3. How can the three core values of the Olympic Movement be achieved by participating in different games and sports?

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Chapter 10

# The Ancient Olympic Games

*Imagine a bright summer morning in ancient Greece, nearly 2,800 years ago. Thousands of people from different city-states are walking towards a small valley called Olympia. Merchants, poets, and priests gather near the great temple of Zeus, while athletes prepare for their races on the dusty track. Among them is a young runner from Sparta. He has trained for months under the sun, running barefoot, eating simple food, and following strict discipline. When the trumpet blows, the crowd falls silent. The runner kneels at the starting line, offers a prayer to Zeus, and races forward with all his strength. The cheers rise as he crosses the finish line, not for fame or gold, but for honour and glory.*

*This was the beginning of the Olympic spirit, a celebration of effort, respect, and unity. From these humble beginnings in ancient Olympia, the idea of the Olympic Games spread across history and continues to inspire athletes and nations today.*

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## Origin and Purpose

In 2004, Indian shooter Rajyavardhan Singh Rathore was honoured with an olive wreath after winning silver at the Athens Olympics. This ancient tradition, where victors received olive crowns instead of gold medals, connected the modern Games back to their origins in ancient Olympia.

The Olympic Games began in ancient Greece nearly 2,800 years ago. According to historical and archaeological evidence, the first recorded Games took place in 776 BCE at a place called Olympia, in the western part of Greece. Olympia was not a large city but a sacred valley surrounded by hills and olive trees.

The main purpose of the Games was to honour Zeus, the chief God of the Greeks, through physical excellence and fair competition. Ancient writers like Pausanias and Herodotus described how the

Games were both a religious festival and a celebration of human strength and skill. The Greeks believed that the body and mind should work together in harmony. Winning an event was seen as a gift to the gods and a way to achieve *arête*, meaning excellence of character. The Games encouraged peace, respect, and moral discipline. They brought together people from different regions, united by a shared belief in effort, fairness, and honour. These early ideals of the ancient Olympics became the foundation for the modern Olympic Movement that began many centuries later.

## Organisation and Events

The ancient Olympic Games were carefully organised and followed sacred traditions. The people of Elis, a small region near Olympia, were responsible for preparing and managing the Games. They acted as judges and were called the *Hellanodikai*, meaning 'Judges of the Greeks'. They trained for ten months before the festival to ensure that all events were fair and that every athlete followed the rules. Only free-born Greek men were allowed to compete. Athletes came from different city-states, such as Athens, Sparta, and Corinth. Before the Games began, every athlete had to take an oath in front of the statue of Zeus, promising to play fairly and respect the rules. This oath showed that honesty and discipline were as important as strength and skill.

**TRIVIA**

Athletes at the ancient Olympic Game trained for ten months before competing and had to prove their Greek citizenship and moral character.

The Games were held every four years and lasted for five days. The first recorded event was the stadion race, a short sprint of about 192 metres. Over time, more events were added. These included:

- Running races of different distances, such as the *diaulos* (two laps) and *dolichos* (long-distance race)
- Wrestling and boxing, which tested strength and technique
- Pankration, a tough event combining wrestling and boxing
- Pentathlon, which included five events—running, long jump, discus throw, javelin throw, and wrestling
- Chariot racing, which was a highlight of the Games and took place in the hippodrome

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All athletes competed without clothing, as the Greeks believed that the human body was a symbol of beauty, balance, and discipline. Training took place in the gymnasia and palaestrae of each city-state, where athletes followed strict diets and routines. The audience at Olympia included citizens, poets, artists, and philosophers. Spectators cheered for athletes from their own cities, and yet, everyone celebrated a shared spirit of effort and honour. The Olympic Games became not only a competition of skill but also a festival of art, religion, and culture.

### LET US REFLECT

Write a paragraph comparing the values emphasised in the ancient and modern Olympic Games. What similarities and differences do you notice?

## Rewards and Olympic Ideals

Winning an event at the ancient Olympic Games was considered one of the greatest honours in Greek society. The prize itself was simple, but the respect it carried was enormous. Victors were crowned with a wreath made of wild olive leaves, taken from a sacred tree near the temple of Zeus. This wreath, called the *kotinos*, symbolised purity, hard work, and peace. Unlike today, the winners did not receive money, medals, or gifts at Olympia. The real reward was honour and fame. When champions returned to their cities, they were welcomed with great celebrations. Poets wrote songs about them, sculptors made their statues, and sometimes the city even granted them free meals for life. These rewards showed that victory was a service to one's community, not just personal success.

The idea behind the Olympic victory was deeply moral and spiritual. Competing in the Games was not just about physical strength but also about courage, fairness, and self-control. Losing

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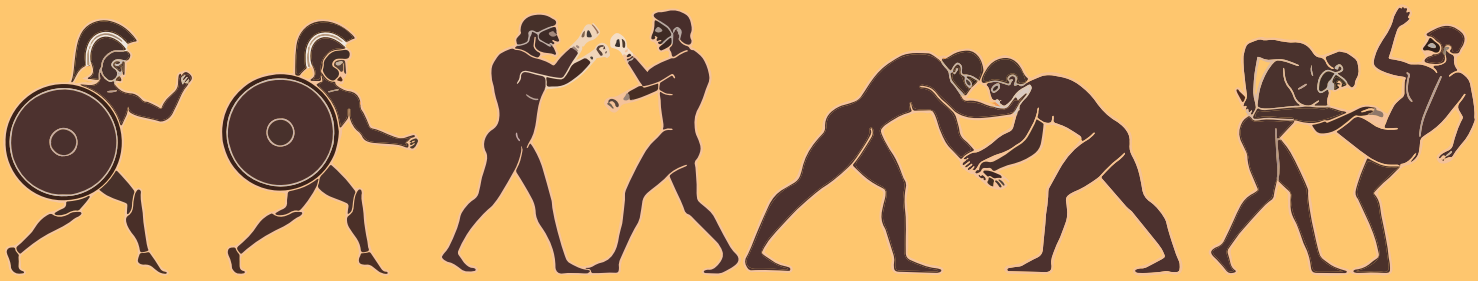

with dignity was also respected, because it showed humility and discipline. The poet Pindar praised Olympic winners in his famous victory odes, describing how their effort and virtue reflected divine blessings. He wrote that true glory comes to those who combine skill with moral strength. This belief became one of the roots of the Olympic ideals—respect, excellence, and friendship—that continue even today. The ancient Greeks saw the Olympic Games as a path to harmony between body, mind, and spirit. This balance is still central to the modern Olympic Movement, which encourages athletes to play with joy, fairness, and honour rather than focusing only on victory.

## Social and Cultural Impact

The Olympic Games were more than sports competitions. They were a festival of peace, culture, and learning that united the people of ancient Greece. Although Greek city-states often fought wars, they stopped all conflicts during the Olympic Truce so that athletes and visitors could travel safely to Olympia. This showed how sport could bring peace and friendship among people. The Games also became a meeting place for art, music, and knowledge. Poets and artists created songs, statues, and paintings to honour the athletes. The philosopher Pindar wrote poems praising the courage and fairness of Olympic winners. At the same time, teachers and thinkers discussed health, discipline, and good character, showing that body and mind should grow together.

The festival also honoured Zeus, the chief deity in ancient Greek mythology. His great temple at Olympia had a huge statue made by the sculptor Phidias, which became one of the Seven Wonders of the Ancient World. Women did not take part in the main Games, but they had a separate event called the Heraean Games, held in honour of the Goddess Hera. These

**DID YOU KNOW?**

Victors sometimes dedicated their olive wreaths to Zeus instead of keeping them, showing gratitude and humility.

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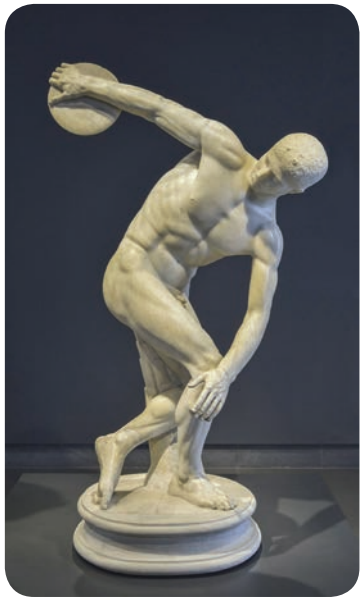
races for young women showed that physical activity was valued for all. The Olympic Games helped the Greeks feel proud of their shared identity and taught the world that sport can promote peace, creativity, and respect for all.

## Decline and Legacy



*Roman Emperor Theodosius I*

The ancient Olympic Games continued for more than a thousand years. Over time, they lost their original spirit of simplicity and honour. As the Roman Empire gained control over Greece, the Games became more luxurious and sometimes unfair. Money and politics started to influence competitions that were once held for moral and religious reasons. In 393 CE, the Roman Emperor Theodosius I banned all pagan festivals, including the Olympic Games, as Christianity became the main religion of the empire. The temples at Olympia were closed, and the site was later damaged by earthquakes and floods. For many centuries, Olympia lay buried under sand and forgotten.

In the 18th and 19th centuries, archaeologists rediscovered the ancient site. The remains of the stadium, temples, and statues helped historians understand how the Games were organised. These discoveries, along with the writings of Pausanias and Herodotus, inspired people in modern Europe to bring back the spirit of the Olympics. The French educator Pierre de Coubertin studied the ideals of ancient Olympia and believed that sport could unite people and promote peace. His vision led to the revival of the Modern Olympic Games in 1896 in Athens, Greece. Thus, the ancient

*Pierre de Coubertin*

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Olympics, though lost for centuries, became the foundation for the modern movement that continues to inspire the world today.

### Activity

Write a letter to your parents as if you just witnessed the first Olympic opening ceremony. Describe what you saw, heard, and felt.

### LET US REFLECT

- What values from the ancient Games are still relevant today?
- How do modern sports promote peace like the Olympic Truce did?

## Exercises

1. Name any four events held in the Ancient Olympic Games.
2. What was the kotinos? What did it symbolise? What does the Greek word arête mean?
3. Why were athletes required to take an oath before competing?

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Chapter 11

# The Modern Olympic Games

*In the late nineteenth century, a young French educator named Pierre de Coubertin dreamed of using sport to bring nations together. He believed that playing games could teach young people courage, discipline, and respect for others. While visiting ancient Olympia in Greece, Coubertin was deeply moved by its history and ideals. Standing among the ruins of the old stadium, he imagined the revival of the Olympic Games as a symbol of peace and friendship among nations. His dream soon began to take shape. In 1894, at a meeting held in Paris, Coubertin and delegates from twelve countries decided to establish the International Olympic Committee (IOC). They agreed to organise the first Modern Olympic Games in Athens, Greece, the birthplace of the ancient Games.*

*Two years later, in April 1896, the dream became reality. Athletes from 13 countries gathered in Athens to compete in 43 events. The Greek athlete Spyridon Louis, a humble water carrier, became a national hero by winning the marathon. The Games were filled with excitement and hope, and they marked the rebirth of the Olympic spirit after nearly 1,500 years. From that moment, the Modern Olympic Games became a celebration of human effort and unity, carrying forward the ideals of Excellence, Friendship, and Respect from ancient Greece to the entire world.*

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## Growth and Development

After the success of the first modern Olympics in 1896, the Games began to grow and attract more countries and athletes from around the world. The idea of peaceful competition inspired nations to join together through sport. Over time, new events, better facilities, and improved organisation made the Olympics the world's largest sporting festival. The International Olympic Committee (IOC), founded by Pierre de Coubertin, became the main body to plan and guide the Games. Every four years, a new city was chosen as the host. The Second Games were held in Paris in 1900, followed by

St. Louis in 1904, and gradually more nations began to participate. At first, only men were allowed to compete. However, women soon gained recognition, through their first participation in the 1900 Paris Olympics, in sports such as tennis and golf. This change reflected the growing idea of equality and inclusion in the Olympic Movement. The Olympic Games continued to evolve even during difficult times. Although they were stopped during the World Wars, they resumed with even greater enthusiasm. The Games became a platform for unity, fair play, and international friendship.

**TRIVIA**

- The first modern Olympics in 1896 had no official national teams. Athletes entered as individuals.
- Only one female athlete took part in the 1896 Games unofficially, as women's events were not yet allowed.

## India's Journey in the Olympic Movement

India's Olympic journey began in 1900, when Norman Pritchard, representing India, won two silver medals in athletics at the Paris Games. Later, India formed its own National Olympic Committee in 1927 and participated as a team in the 1928 Amsterdam Olympics. That year, Indian men's hockey team, led by Dhyan Chand, won the gold medal. It was the beginning of India's golden era in hockey, when the country went on to win eight Olympic gold medals between 1928 and 1980. Over the years, India expanded its presence in many sports. Many athletes reflected the true Olympic values of excellence, perseverance, and respect.

**LET US EXPLORE**

Create a list of Indian athletes who have won medals in the Olympics in the following order—events, year, position, score, and the sport in which Indian contingent participated as a team.

## Global Development and New Additions

- The modern Olympics also grew to include new ideas and categories.
- The Winter Olympics began in 1924, featuring sports like skiing and ice hockey.

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- The Paralympic Games were started in 1960, and gave athletes with disabilities a global platform to compete with courage and skill.
- The Youth Olympic Games, first held in 2010, encourage young athletes to learn Olympic values and friendship through sport.

Today, the Olympic Games bring together over 200 countries and thousands of athletes, carrying forward Pierre de Coubertin's dream of using sport to build peace and understanding among nations.

**DID YOU KNOW?**

- The marathon distance (42.195 km) was fixed at the 1908 London Olympics so that the race would finish in front of the royal box.
- The first Olympic torch relay was introduced at Berlin in 1936, linking the modern Games to ancient Olympia.
- The youngest-ever Olympic champion was 10-year-old Dimitrios Loundras (Greece, 1896, gymnastics).

**LET US REFLECT**

- How did the modern Olympics bring the world together after many wars?
- Why do you think women's inclusion in the Games was a turning point?

## The Identity of the Olympic Movement

### The Olympic Creed

The Olympic Creed is a short message that expresses the true meaning of the Games. It reminds athletes and everyone watching that participating with effort and courage is more important than winning. The Creed was first spoken by Bishop Ethelbert Talbot during the 1908 London Olympics and later adopted by Pierre de Coubertin, the founder of the modern Games. It reflects the spirit of fair play and personal excellence that Olympism stands for. The Olympic Creed says:

"The most important thing in the Olympic Games is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well."

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This message teaches us that victory lies in honest effort and courage, not just medals or records.

## The Olympic Symbol (Five Rings)

The Olympic symbol is made up of five interlaced rings— blue, yellow, black, green, and red— on a white background. These rings represent the union of the five continents and the meeting of athletes from all over the world at the Olympic Games. The symbol was designed by Pierre de Coubertin in 1913. He chose these colours since every national flag in the world contains at least one of them, showing the idea of universality and inclusion. The Olympic rings first appeared on a flag in 1914 and were officially introduced at the 1920 Antwerp Games. Since then, they have become the most recognised emblem of global peace and sportsmanship.

**TRIVIA**

- The five rings were first displayed in 1914 but appeared in the Games only in 1920 due to World War I.
- The Olympic flag is stored at Lausanne, Switzerland, when not used in the ceremonies.

## The Olympic Flag

The Olympic Flag is one of the most important symbols of the Olympic Games. It carries the five interlaced rings on a white background, representing peace, purity, and unity among nations. The flag was designed by Pierre de Coubertin in 1913 and officially presented in 1914 at the Olympic Congress in Paris. However, it was first used during the 1920 Antwerp Olympic Games in Belgium. The white background stands for peace, while the five coloured rings show the coming together of athletes from the five continents in a spirit of friendship and fair play. At every Olympic Games, the flag plays a central role at the Opening and Closing Ceremonies. It is raised when the Games begin and lowered at the end. The Olympic Charter states that the flag must always remain clean, untorn, and treated with respect.

## The Olympic Motto

The Olympic Motto expresses the spirit of constant effort, improvement, and unity among athletes and nations. The original motto, "*Citius, Altius, Fortius*", is a Latin phrase that means "Faster, Higher, Stronger." It was first proposed by Father Henri Didon, a

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French teacher, and later adopted by Pierre de Coubertin when he founded the modern Olympic Games. In 2021, the motto was officially updated by the International Olympic Committee to include a new word: 'Together'. The complete motto now reads "*Citius, Altius, Fortius—Communiter*", which means "Faster, Higher, Stronger—Together." This change reflects the modern Olympic belief that success in sport and in life comes through teamwork, solidarity, and shared effort.

## The Olympic Oath

The Olympic Oath is a promise made by the athletes, coaches, and judges during the Opening Ceremony of every Olympic Games. The first Olympic Oath was introduced at the 1920 Antwerp Games. It was written by Pierre de Coubertin and spoken by Belgian fencer Victor Boin on behalf of all athletes. Since then, the wording of the oath has been updated several times to reflect fairness, equality, and inclusion. During the ceremony, one athlete, one coach, and one judge from the host country hold a corner of the Olympic flag and take the oath. This tradition symbolises unity and shared responsibility among all participants. The current Olympic Oath (as per IOC 2025) says:

"In the name of all competitors, I promise that we shall take part in these Olympic Games, respecting and abiding by the rules and in the spirit of fair play, inclusion and equality, together we stand in solidarity and commit ourselves to sport without doping, without cheating, without any form of discrimination."

**DID YOU KNOW?**

- The Olympic Oath was expanded in 2000 to include coaches and judges, not only athletes.
- The Olympic Anthem was sung in Japanese and Greek at the Tokyo 2020 Opening Ceremony to honour tradition and the host nation.
- The Olympic emblem of each Games must receive formal approval by the IOC to protect its symbolic integrity.

## The Olympic Emblems

Every Olympic Games has its own official emblem, which acts as the visual identity of that edition of the Games. It usually combines the Olympic rings with symbols, colours, or designs that represent the host country's culture, values, and vision. The emblem appears on flags, banners, uniforms, tickets, and souvenirs. It helps create a sense of unity and pride for both the athletes and the host nation. The

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design of each emblem must follow strict rules set by the International Olympic Committee (IOC) to ensure respect for the Olympic symbols. The first official Olympic emblem appeared at the 1924 Paris Games. Since then, every host city has designed a new emblem that reflects its own identity. The Tokyo 2020 emblem used circular shapes to represent harmony and diversity. The Beijing 2008 emblem was inspired by a traditional Chinese seal, and symbolised movement and passion. The Paris 2024 emblem combines the Olympic flame with the face of Marianne, a national symbol of France, representing equality and spirit.

## The Olympic Anthem

The Olympic Anthem is a song that expresses the spirit of peace, friendship, and unity of the Olympic Games. It is played during the Opening and Closing Ceremonies whenever the Olympic flag is raised or lowered. The anthem was composed by Spyros Samaras, a Greek musician, with lyrics written by Kostas Palamas, a famous Greek poet. It was first performed at the first Modern Olympic Games in 1896 in Athens, Greece. For many years, different Olympic host cities used their own songs. In 1958, the IOC officially adopted the composition by Samaras and Palamas as the official Olympic Anthem. Since then, it has been performed in every Olympic Games in various languages and musical styles.

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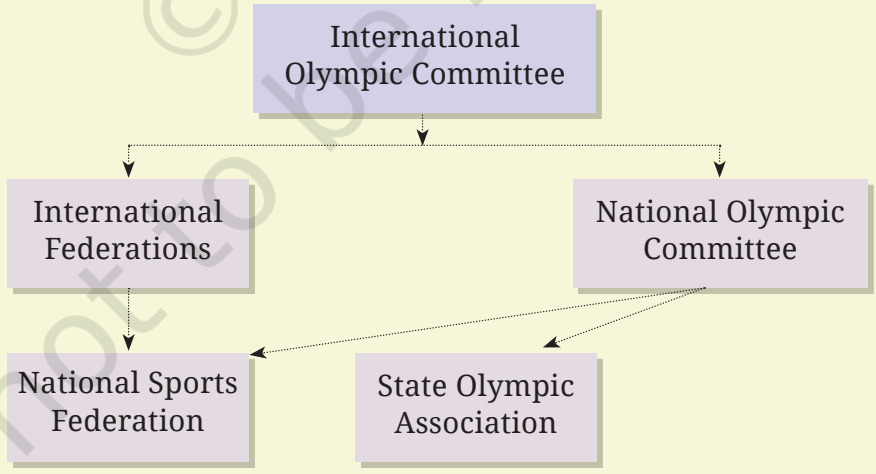
**LET'S EXPLORE**




Explore the protocols, liabilities, election procedures of each units and their constituents shown in the above organogram, and create a similar organogram of the International Paralympic Committee.

## LET US REFLECT

- Which Olympic symbol do you connect with the most and why?
- How do symbols and flags help unite people across countries?

## Exercises

1. What is the Olympic Creed?
2. What do the five Olympic rings symbolise?
3. What is the meaning of the Olympic motto "*Citius, Altius, Fortius–Communiter*"?

## Check Your Progress

### Answer in brief

1. If you were an athlete in ancient Greece, how would you prepare for the Games?
2. Compare the rewards given to ancient Olympic winners and modern Olympic winners.
3. How can the idea of arête be applied in school life today?
4. How does the structure of the IOC and National Olympic Committees ensure smooth organisation of the Games?
5. If you were designing an Olympic emblem for your country, what elements would you include and why?

### Answer the following in detail

1. Compare the Ancient Olympic Games with today's Olympic Games. Highlight at least three similarities and three differences.
2. How has the Olympic Movement evolved to promote equality and inclusion (for example, Paralympics, Youth Olympics)?
3. Why is participation considered more important than winning according to the Olympic Creed?
4. How do Olympic symbols (flag, motto, oath, anthem) strengthen the identity of the Games and promote other characteristics of humanity?

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UNIT

4

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# Sports for All

*This unit emphasises the importance of making sports accessible and inclusive for everyone, regardless of age, gender, varied ability, or socio-economic background. It highlights the concept of sports as a fundamental human right, as outlined in global frameworks like the UNESCO Charter of Physical Education and the European Sports Charter. This unit explores how sports can promote happiness, unity, and good health, while fostering social inclusion and breaking barriers. It also highlights the challenges faced by marginalised groups, such as a lack of access to facilities, financial constraints, societal attitudes, and provides measures to promote inclusiveness. These include developing accessible infrastructure, enforcing anti-discrimination policies, promoting grassroots programmes, and supporting traditional and indigenous games like Kabaddi and Kho-Kho. Through activities and discussions, students are encouraged to design inclusive games, explore barriers to participation, and propose solutions to make sports more accessible. The unit emphasises the transformative power of sports in building teamwork, self-esteem, and community bonds, while fostering peace, equality, and mutual respect. It inspires students to advocate for inclusiveness and work towards creating a society where sports are truly for all.*

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Chapter 12

# Sports and Inclusivity

*Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does.* — *Nelson Mandela*

During a school's annual sports day, the final race was about to begin. The crowd cheered as the whistle blew, but halfway down the track, one boy stumbled and fell. The other runners could have surged ahead—glory was just metres away. But something remarkable happened. One by one, they stopped. They reached down, helped him to his feet, and together, they crossed the finish line—hands raised high in triumph.

This moment captures the essence of Sports for All: not just victory, but unity, fairness, and shared joy.

*Fig. 12.1*

**DID YOU KNOW?**

- India's Khelo India initiative aims to promote sports culture at the grassroots level nationwide.
- The United Nations declared April 6 as the International Day of Sports for Development and Peace.

According to the 2015 UNESCO International Charter of Physical Education, Physical Activity, and Sport, "The practice of physical education and sport is a fundamental right for all". Additionally, the European Sports Charter states that, "All human beings have an inalienable right of access to sport in a safe environment".

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## Activity

*Fig. 12.2*

The four scenes in Fig. 12.2 highlight the theme of 'Sports for All'. They show boys and girls playing together, promoting equality and teamwork. One scene also shows an elderly person participating, defying age as a barrier to sports. Overall, the pictures emphasise inclusion, fun, fitness, and equal opportunities for everyone.

How do these scenes promote the concept of 'Sports for All'?

- What is common in all the pictures? Is it enough to say that sports should be a fundamental right for all?
- Justify through arguments how sports bring happiness, togetherness and good health for all.
- Discuss the answers given by your friends and summarise why sports are for all.

## Meaning and Necessity

"Sports for All" isn't just a slogan—it's a fundamental right according to the UNESCO Charter of Physical Education.

Everyone, regardless of age, gender, ethnicity and, socio-economic background, deserves access to physical activity and sports.

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It transforms sport from a privilege of the few into a vehicle for societal well-being, togetherness personal growth and community connection that goes beyond competition.

### Activity

Form groups and prepare a 3-minute speech on one of these topics. Include facts, data, and real examples from the field of sports:

1. Equal right to participate
2. Focus on participation, not just winning
3. Accessible infrastructure for all
4. Cultural inclusivity

Deliver your speech in class.

## Theoretical Foundations

"Sports for All" also means valuing both modern competitive sports and ethnosport (traditional and indigenous games like Kabaddi, Kho-kho, Mallakhamb, etc.). This promotes cultural heritage, fosters a sense of identity, and makes participation relatable for all communities.

### Why is it considered important?

- **Human Rights Perspective:** Treating sports as a basic right democratises access and challenges exclusion based on socio-economic, cultural, or physical barriers. No child should be told they cannot play because of their gender, caste or disability.
- **Social Development Tool:** Sports nurtures teamwork, self-esteem, and community, serving as an instrument for peace, inclusion, and cross-cultural dialogue.
- **Ethical Vision:** Through the lens of dignity and capabilities, sports becomes a transformative medium that helps individuals flourish.
- **Cultural Preservation:** By valuing diverse traditions through ethnosport, we retain identity and promote inclusive participation.

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### Activity

An extempore on the importance of sports for all shall be conducted in the classroom by a lottery system. The student will speak on any of the following topics:

- Sports as a social tool for peace
- Ethnosports for promoting inclusive participation
- Treating sport as a basic tool for equality
- Sports for value inculcation

## Inclusiveness of Sports

Inclusiveness in sports refers to the principle and practice of ensuring that everyone, regardless of their background, abilities, gender, age, or social status, has the opportunity to participate and benefit from sporting activities.

### Activity

Design and play inclusive games using ideas like blindfolding, keeping one arm back or using one leg by a few students respectively.

- Write down the rules in 5 points or fewer.
- Make sure the game encourages teamwork and fair play.
- Present your game to the class and explain how it is inclusive.

Discuss which specific rule, playing condition, equipment or ideas make the game inclusive.

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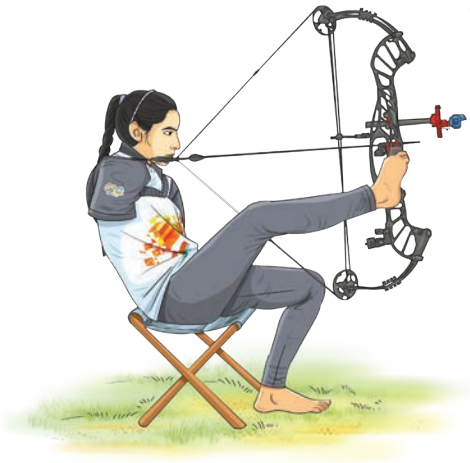
### Key Dimensions of Inclusiveness

Inclusiveness is not restricted to one-size-fits-all. It operates across multiple dimensions:

1. **Gender Inclusiveness:** Ensuring equal opportunities for both women and men in sports participation, coaching, and leadership. Initiatives like 'This Girl Can' promote female involvement and visibility in sports. Games such as Korfball, Ultimate Frisbee, and Mixed Doubles in various sports are examples that encourage equal participation.



2. **Disability Inclusion:** Adapted sports enable persons with disabilities to participate fully. The Paralympic Games and Special Olympics are prime examples of platforms that celebrate athletic ability regardless of physical or intellectual challenges.
3. **Socio-economic Inclusion:** Removing cost barriers by providing free or affordable access to facilities, equipment, and coaching ensures that everyone, regardless of their economic background, has the opportunity to participate.
4. **Cultural and Ethnic Inclusion:** Incorporating ethnosports (traditional and indigenous games) alongside mainstream sports promotes cultural identity and attracts more diverse participants. For instance, including sports like Kabaddi and Kho-kho in India ensures local relevance and different government training centres.

5. **Age Inclusion:** Sports programmes must cater to all age groups, from children to older adults. Modified rules, age-friendly equipment, and non-competitive formats help maintain lifelong participation.

## Challenges to Inclusiveness in Sports

While the above dimensions highlight what inclusion should look like, achieving them is not without obstacles. Let us learn about some key challenges to inclusiveness in sports through an activity.

### Activity for the students (Community outreach activity)

1. Form five groups of five to seven students each on the following themes:
   - Socio-economic inequality — players from varied-income backgrounds

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- Gender — players of different genders
- Player with Disability — players with different levels of physical and mental disability
- Rural players — players from rural areas
- Urban players — players from urban areas

2. Students will identify two to three players representing each team and will conduct group interview to identify their challenges in preparing for and playing the sports.
3. After the interview, students will individually fill the following table. They can use the following words to express the challenges for the respective group:

   Access to facilities, equipment, lack of coaching, parents consent, financial support, feeling of shyness, fewer opportunities, less media coverages, societal rituals, traditional restrictions.

| Groups | Challenges |
|---|---|
| Socio-economic inequality | |
| Gender — all genders | |
| Players with disabilities | |
| Rural players | |
| Urban players | |

Based on what we just learnt, let us now understand them in detail.

- Socio-economic inequality, where individuals from low-income backgrounds lack access to proper facilities, equipment, and coaching.
- Women and girls in many regions receive fewer opportunities, less media coverage, and limited financial support compared to their male counterparts.
- Disability inclusion also remains a concern, as not all sports venues are designed to be accessible, and adaptive sports programmes are still underdeveloped in many areas.
- Cultural and societal attitudes sometimes discourage participation, especially in communities where certain

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groups, such as women or people with disabilities, face traditional restrictions.

- Geographical limitations can also hinder access, with rural and remote areas often lacking infrastructure for organised sports.

## Measures to Promote Inclusiveness in Sports

### Develop accessible sports infrastructure for all

It is important to construct accessible parks, playgrounds, and stadiums so that everyone, including children, the elderly, and those with disabilities, may use them. For example, gender-neutral restrooms, tactile walkways for the blind, wheelchair-accessible seating, and ramps.

### Enforce equal opportunity and anti-discrimination policies

It must be specifically stated in the regulations that anyone can participate in sports, regardless of gender, disability, caste, religion, or socio-economic status. Strict anti-discrimination laws encourage fairness and respect.

### Promote grassroots and community-level sports programmes

Local or community-based sporting events may be planned where women, children, and excluded communities can participate without worrying about being judged. Street sports events, school-level competitions, and community tournaments all help to make play more inclusive and accessible.

### Provide inclusive training for coaches and officials

Sports officials, coaches, and referees play an essential role in creating a fair environment. To prevent bias, they should be trained in inclusive practices, such as assuring equal playing time, modifying rules for athletes with disabilities, and using positive language.

### Run awareness and media campaigns promoting diversity

Featuring women athletes, para-athletes, and persons from various cultural backgrounds through posters, social media posts, and community announcements encourages society to respect inclusivity.

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### Support traditional and indigenous games

Encouraging indigenous games promotes cultural inclusion by treating regional customs with same respect. For example, regional sports like kabaddi, kho-kho, or wrestling allows participation by individuals from a variety of social and economic backgrounds without the need for costly equipment.

### Ensure financial assistance and scholarships for underprivileged athletes

Financial challenge is a major obstacle to inclusion. By offering travel allowances, reduced fees, free equipment, and scholarships, underprivileged athletes can take advantage of chances that might otherwise be out of reach. This not only reduces inequalities but also motivates talented people from underprivileged backgrounds to take sports seriously.

**DID YOU KNOW?**

All healthy adults (18–65 years) should do some physical activity regularly.

- Do at least 30 minutes of moderate exercise (like brisk walking or cycling) 5 days a week, or do at least 20 minutes of vigorous exercise (like running or fast swimming) 3 days a week.
- A combination of both moderate and vigorous activities is necessary to stay healthy. The 30 minutes of moderate exercise can be split into smaller parts (at least 10 minutes each). Additionally, every adult should engage in exercises to strengthen their muscles at least 2 days a week.

## Exercises

1. Name any four dimensions of inclusiveness in sports.
2. Give two examples of ethnosport gaining popularity.
3. Are grassroots sports programmes important? Discuss with your peers.

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Chapter 13

# Sports and Disability

*In a small village in India lived a boy who was full of energy and loved playing with other children. One day, he suffered from a serious illness that left him with a disability. Walking and moving became difficult for him.*

*Many people in his village felt sorry for him and thought his life would be full of struggles. But he was determined not to give up. He believed that he could still do something special. He found hope in swimming. Even though his body was weak, but his spirit was strong. He started practising in the village well and later in proper swimming pools.*

*With years of hard work, he became a skilled swimmer. His courage and dedication helped him to participate in the Paralympics, where he represented India with pride.*

*His story shows us that disability is not inability. What matters is willpower, confidence, and never giving up.*

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Sports are not just about winning medals, but about enjoying movement, building health, and learning teamwork. Sports have a special way of bringing people together. When we play a game, we share movement, laughter, effort, and teamwork. In those moments, differences matter less, and what matters more is participation and enjoyment. That is why sports are often seen as a space where everyone can feel included. For people with disabilities, sports can be especially empowering, helping them develop independence, self-belief, and a strong sense of belonging.

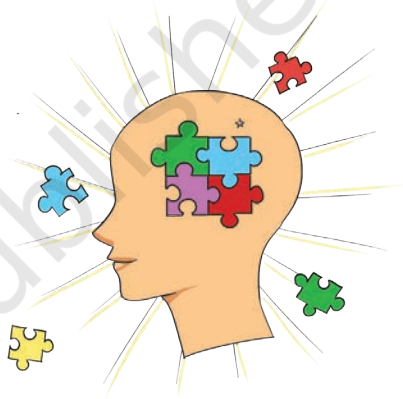
In the past, many people with disabilities were left out of games and physical activities because others did not understand how to include them. Today, attitudes are changing,

and we understand that disability does not mean inability. With some changes in rules, equipment, or the playing environment, everyone can take part in sports. These are called adapted sports, and they show how sports can be made welcoming for all.

Disability is defined as a condition that restricts a person's ability to perform everyday activities due to impairments in physical, sensory, intellectual, or psychological functioning. Disabilities can be congenital (present at birth) or acquired later in life due to illness, accident, or ageing.

The World Health Organisation (WHO) and the Rights of Persons with Disabilities Act, 2016 (India) classify disabilities into broad categories: physical, sensory, intellectual, learning, psychosocial, and multiple disabilities.

To ensure inclusion and equal opportunities, the Government of India officially recognises certain conditions and offers benefits and assistance. Under the Rights of Persons with Disabilities Act, 2016, twenty-one types of disabilities are recognised for support. Such measures remind us that every person deserves respect, opportunities, and the chance to participate fully — including in sports.



## Understanding Disabilities through Observation

Look carefully at the Fig. 13.1 showing people with different disabilities (wheelchair users, a person with a guide dog, an amputee athlete, etc.).

Discuss with your teacher and find out the list of 21 disabilities under the RPwD Act, 2016, and identify which types of disabilities you think are represented in the picture.

**Example:** Person using a wheelchair, Locomotor Disability.

Person walking with a guide dog for Blindness or Low Vision.

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*Fig. 13.1*

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**Discuss in pairs or small groups**

1. Which disabilities are visible in the image?

   .....

2. Which disabilities are not visible but are still important (like learning disabilities, autism and blood disorders)?

   .....

**Write down your answers below**

| **Visible Disabilities** (shown in the picture) | **Invisible Disabilities** (given in the list, but not shown in the picture) |
|---|---|
| | |
| | |
| | |

## Benefits of Sports Participation with Disabilities

| Children and Teenagers | Adults | Elite Athletes |
|---|---|---|
| Make new friends and feel included | Stay fit and healthy | Win medals and get recognition |
| Learn teamwork and enjoy playing together | Build confidence and independence | Break stereotypes about disability |
| Feel happy and proud of achievements | Find purpose and enjoyment in life | Show dedication, discipline and mental strength |
| Improve fitness and confidence | Get support from teammates and friends | Inspire society and challenge wrong beliefs |
| Have fun and create a sense of belonging | Accept and adapt to disability | Gain equality, respect, and opportunities |

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### LET US REFLECT

- After looking at the images, what did you understand about the types and degrees of disabilities?
- Why is it important to recognise that some disabilities cannot be 'seen' just by looking at a person?

## Barriers to Adaptive Sports Participation

People with disabilities often face many challenges in taking part in sports. Some common barriers include lack of accessible playgrounds, high cost of equipment, and difficulty in transportation. Many also struggle with limited knowledge of opportunities, shortage of activities, or lack of social support. Health issues, pain, and risk of injury can also hinder participation. These barriers show why schools and communities must work together to make sports inclusive for everyone.

## The Meaning of "Paralympic"

The word Paralympic comes from the Greek word *para* (meaning "beside" or "alongside") and the word olympic. This illustrates that the Paralympic Games are held parallel to the Olympic Games, giving athletes with disabilities the same chance to compete at an international level.

### TRIVIA

At present, the Paralympic Games include 28 sports — 22 summer sports and 6 winter sports. These sports are adapted to allow athletes with different types of disabilities to compete at the highest level.

### The Paralympic Games

The Paralympic Games are the highest level of competition for elite athletes with physical disabilities. Just like Olympic athletes, Paralympians train hard, follow strict qualification rules, and compete with the goal of achieving their personal best — and a gold medal. The Paralympics give athletes with disabilities an environment of excellence, fairness, and pride.

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## Opportunities for Paralympic Athletes

Through the Paralympic Games, athletes with disabilities get the chance to:

- Pursue their goals and ambitions in sport.
- Dream of medals and international recognition.
- Train rigorously with discipline and commitment.
- Qualify by merit, meeting high international standards.
- Showcase excellence, courage, and determination to the world.

### LET US REFLECT

Which barrier do you think hinders participation the most? Discuss with your classmates and try to identify possible solutions.

### Activity

Match the following.

| Barriers | Solutions |
|---|---|
| (i) High cost of sports equipment | (a) Provide school buses or special vans with wheelchair space |
| (ii) Lack of ramps or accessible playgrounds | (b) Organise awareness programs and inclusive sports events |
| (iii) No transport to reach sports grounds | (c) Encourage peer support and buddy systems |
| (iv) Not enough knowledge about opportunities | (d) Gain access to government or NGO funding and donations for equipment |
| (v) Lack of friends' or family support | (e) Build ramps, rails, and accessible sports facilities |

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## Core Values of the Paralympic Movement

The Paralympics are guided by four main values:

1. **Courage:** Athletes show bravery by doing what many people think is impossible.
2. **Determination:** They push their physical and mental limits to achieve success.
3. **Inspiration:** Their stories motivate others to face challenges with hope and strength.
4. **Equality:** Paralympic sports fight against discrimination and promote inclusion for all.

### Activity

1. Pick one Paralympic value (Courage, Determination, Inspiration, or Equality) and create a poster showing how this value can be used in your own life (in school, sports, or at home).

**Disability Simulation Game**

2. Blindfold some students and ask them to walk short distances guided by a partner. Give earplugs to a few students and ask them to communicate with gestures only. Ask others to write using their non-dominant hand.

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## Exercises

1. Name the five broad categories of disabilities as recognised by the WHO and RPwD Act, 2016.
2. What are adapted sports? How many sports are currently included in the Paralympic Games?
3. Are accessible playgrounds important for inclusion? Justify.

## Eligible Impairment Types

### Paralympics: The 10 eligible impairments

**Event categories are established in relation to 10 types of physical, vision and intellectual impairments formally recognised by the Paralympic organisation**

**Impaired muscle power**

Spinal cord injury, polio muscular dystrophy

**Impaired passive range of movement**

Restricted joint movement, either through a health condition or through trauma

**Limb deficiency**

Total or partial absence of bones or joints as a consequence of trauma, illness or from birth

**Leg-length difference**

Either through disturbed limb growth or result of trauma

**Short stature**

Reduced length in or trunk bones of arms and legs

**Muscle tension (hypertonia)**

Cerebral palsy, brain injury, stroke

**Uncoordinated movements (ataxia)**

Cerebral palsy, traumatic brain injury stroke

**Involuntary movements (athetosis)**

Cerebral palsy, traumatic brain injury, stroke

**Visual impairment**

Reduced or no vision either from birth or through injury, or a condition

**Intellectual impairment**

Must be present before the age of 18

*Fig. 13.2*

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Chapter 14

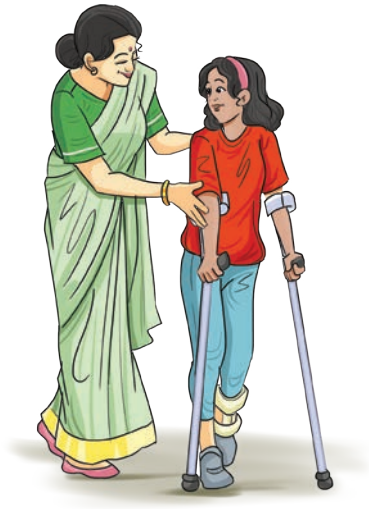
# Disability Etiquettes: Respecting Everyone with Dignity

*Rohan is in Grade 9 and very excited about the new school year. On the first day, a new student named Arjun joined their class. Arjun used a wheelchair because of a spinal injury. During lunch break, some students quickly ran off to the playground, but Arjun stayed behind because the path was uneven. Rohan noticed this but wasn't sure what to do. Should he offer help? Should he ask Arjun questions? Or would that make him uncomfortable?*

*Later, in the classroom, Arjun struggled to reach a book on a high shelf. Some classmates watched silently, while others whispered. Rohan wanted to help, but he didn't want Arjun to feel bad.*

## LET US REFLECT

- If you were in Rohan's place, what would you do?
- How can we be helpful without making someone feel uncomfortable or different?
- What does this story teach us about respecting people with disabilities?



Now that we've thought about Rohan's situation, let's understand the meaning of etiquette and how it applies to everyone.

Etiquette means good manners and the right way of behaving with others. It helps us to be polite, respectful, and friendly in our daily life. General etiquette includes simple things like saying "thank you", listening carefully when someone talks, and respecting other people's space.

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Disability etiquettes are about the correct ways of behaving with people who have disabilities. It teaches us to treat them with respect and kindness, without pity or overprotecting them. People with disabilities want to be seen as individuals first, not just for their disability. By following disability etiquette, we can make them feel included, confident, and equal in society.

## What are General Etiquettes?

These are basic principles of respectful, courteous behaviour toward all individuals:

1. **Be Respectful:** Treat everyone with dignity and consideration.
2. **Be Inclusive:** Don't assume people can or can't do things based on appearance.
3. **Ask Before Helping:** Never assume someone needs help—always ask first.
4. **Use First-Person (when preferred):** One example would be "person with a disability" instead of "disabled person" (though some prefer identity-first, like "autistic person"—so follow individual preferences).
5. **Don't Stare, Point, or Make Jokes:** Avoid drawing attention to someone's disability or differences.

## Disability Etiquettes

Respectful interaction with people who have disabilities includes awareness, sensitivity, and using appropriate language and behaviour.

When interacting with people who have different types of disabilities, here are some specific guidelines to follow:

1. **Wheelchair Users**
   - Don't push someone's wheelchair without permission.
   - Speak directly to the person, not to someone with them.

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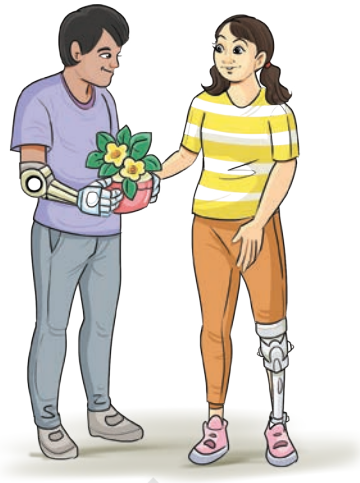
2. **People with Visual Impairments**
   - Identify yourself when approaching.
   - Offer your arm for guidance—don't grab them.



3. **People with Hearing Loss**
   - Face the person and speak clearly—don't shout.
   - Use gestures, writing, or apps if needed.
4. **People with Speech Difficulties**
   - Be patient—don't finish their sentences.
   - Ask them to repeat if you don't understand.
5. **People with Cognitive or Developmental Disabilities**
   - Use clear, simple language.
   - Be patient and offer extra time if needed.
6. **People with Invisible Disabilities**
   - Don't judge or question whether a person's disability is real.
   - Respect their need for accommodations even if you can't "see" the disability.

### General Dos and Don'ts

| Dos | Don'ts |
|---|---|
| Use respectful language | Use derogatory or outdated terms |
| Speak directly to the person | Speak through their companion |
| Offer assistance (ask first) | Assume help is needed |
| Respect mobility aids | Touch or move equipment without asking |
| Be patient and listen | Interrupt, guess or rush communication |

## STEP Model – For Inclusive Learning

Understanding etiquette is important, but how do we actually make our classrooms and activities inclusive? The STEP Model gives us a practical way to adapt any activity so everyone can participate.

The STEP Model is used to make activities inclusive and suitable for everyone, including persons with disabilities.

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It focuses on changing four things: Space, Task, Equipment, and People.

### S = Space

- **Meaning:** Adjust the environment or place where the activity is done.
- **Examples**
  - Make the play area smaller for easier movement.
  - Use a flat, safe surface instead of uneven ground.
  - Reduce noise and distractions in the environment.

### T = Task

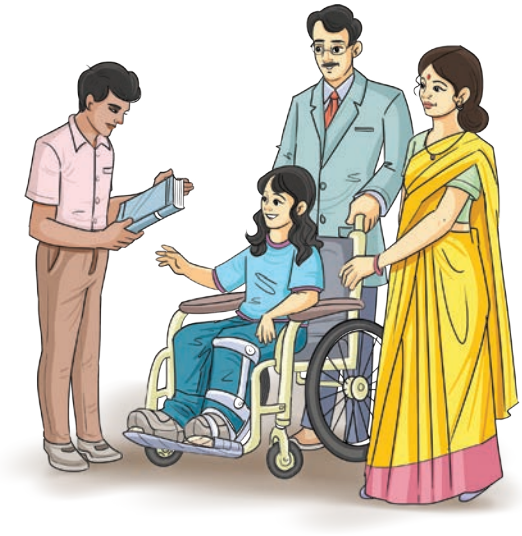
- **Meaning:** Change the way the activity or task is done.
- **Examples**
  - Simplify the rules of the game.
  - Break a big activity into smaller steps.
  - Allow extra time for completing the task.

### E = Equipment

- **Meaning:** Use or modify equipment so everyone can take part.
- **Examples**
  - Use bigger and softer balls.
  - Use bright-coloured or sound-enabled objects for easy visibility/hearing.
  - Provide lightweight equipment for easier handling

### P = People

- **Meaning:** Change how people are grouped or paired in an activity.
- **Examples**
  - Pair a strong student with one who needs more support.
  - Make smaller groups so everyone gets a chance.



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## Importance of STEP Model (Single-Line Points)

1. **Promotes Inclusion and Equality:** It allows all students, with or without disabilities, to participate together.
2. **Builds Confidence:** Adapted activities help disabled students feel capable and proud.
3. **Encourages Participation:** It motivates students with disabilities to join games and classroom tasks.
4. **Develops Empathy and Teamwork:** It teaches students to support, respect, and work with each other.
5. **Improves Learning Outcomes:** Step-by-step tasks and adapted tools make learning easier and faster.
6. **Makes Activities Safe and Accessible:** Changes in space and equipment ensure safety for everyone.
7. **Prepares for Inclusive Society:** It helps students learn to live in harmony with people of all abilities.

### Activity

**STEP Worksheet (Classroom Task)**

*Objective*: To practice applying the STEP Model to real activities.
*Method*:

- Create a worksheet with four columns: Space, Task, Equipment, People.
- Choose an activity (for example, “Running Race” or “Class Quiz”).
- Think about a student who uses a wheelchair, or has a visual or hearing impairment.
- In each column, write how you would adapt that part of the activity to include everyone.

Example: If the activity is ‘Running Race,’ under ‘Space’ you might write: 'Use a flat, wide track that wheelchairs can use easily.

## Exercises

1. List any four general principles of disability etiquette.
2. How does the STEP Model promote inclusion?
3. How can overprotecting someone make them feel uncomfortable?

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Chapter 15

# Young Athlete

*Swami Vivekananda once said, "You will be nearer to heaven through football than through the study of the Gītā."*

*By this, he did not mean that reading the Bhagavad Gītā was unimportant. He wanted to teach young people that physical strength and good health are just as important as spiritual learning. According to him, a strong body helps to build a strong mind, and only a healthy and active person can truly understand and follow spiritual teachings.*

*Vivekananda encouraged the youth to play games, exercise, and stay fit, because physical development is the first step toward becoming confident, disciplined, and spiritually aware.*

## Youth Participation and Health in Sports

Many children and teenagers today participate in different sports, and participation is growing every year. Young athletes often train throughout the year and may focus on one particular sport. By the time they reach adolescence, some may even compete at national or international levels.

Preteens often dedicate numerous hours weekly to sports such as tennis, gymnastics, hockey, or football. They sometimes travel with their teams to compete against peers of similar skill levels. Engaging in sports from a young age offers multiple health advantages, including enhanced fitness, teamwork, and confidence.

However, intense training and competition can sometimes lead to injuries or health problems. Conditions like asthma, heart defects, or Type 1 diabetes may appear or be diagnosed for the first time when a child starts regular sports training. Because young bodies are still growing, it is important to:

- monitor health carefully,

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- ensure proper warm-up and rest,
- prevent and manage injuries, and
- encourage balanced nutrition and hydration.

With the right care and guidance, young athletes can enjoy sports safely, stay healthy, and perform at their best.

**Activity**

Choose a sport of your choice and design a healthy training regimen to prevent injuries or any other health-related concerns.

## Growth, Performance, and Fair Play in Youth Sports

- **Rapid Changes During Growth:** During childhood and adolescence, the human body changes more than at any other time in life. As children grow, their height, weight, strength, and coordination develop at different speeds. These changes affect how well they perform in sports.
- **Peak Performance and Maturity:** Some famous athletes, like Simone Biles (gymnastics champion at 16) and Alina Zagitova (Olympic gold medalist at 15), reached great success in their teenage years. However, for most people, sports performance improves gradually through childhood and adolescence and reaches its peak in their early 20s.

  In younger children (under 12), early and late physical maturity doesn't make a big difference. But during adolescence, those who mature earlier often have an advantage in sports like football, hockey, and rugby, because they are usually stronger and faster than late-maturing players of the same age.

## Aerobic and Anaerobic Capacity

- Aerobic Capacity means how well your heart and lungs work to supply oxygen during activity. It increases with growth and training.

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- Anaerobic Capacity is the ability to use short bursts of power and energy, like sprinting or jumping. It also improves as the muscles grow stronger with age.

In boys and girls before puberty, strength levels are quite similar. During and after puberty, boys gain more muscle mass, which increases their overall strength and power.

## Creating a Level Playing Field

Have you ever noticed that students of the same age can look very different in height, strength, and build? This is because everyone grows and develops at their own pace. In sports, this can sometimes create unequal competition. For example, one 13-year-old who matures early may be much taller and stronger than another 13-year-old who is still growing. When such players compete against each other, it can be unfair and may even increase the risk of injury.

To make competitions safer and fairer, some sports organise players by weight categories rather than by age alone. This is common in games like rugby and combat sports. Grouping athletes this way helps ensure that participants compete against others of similar size and strength, giving everyone a fair chance to compete and enjoy the game.

**DID YOU KNOW?**

- Growth and maturity happen at different times for everyone.
- Athletes who mature early may perform better temporarily, but everyone catches up over time.
- Fair competition should consider both age and physical development.
- Training, rest, and balanced nutrition are essential for safe and healthy performance.

### Activity

Think about your favourite sport. What rules or changes could make it fair for players who grow or mature at different speeds? Should players be grouped by skill level, weight, or experience instead of only age? Write your ideas in 3–4 sentences, explaining how your suggestions would make the game safer and more enjoyable for everyone.

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## Early Specialisation: Good or Bad?

The idea of early specialisation—when a child focuses on just one sport from a very young age—has been debated for many years. Some coaches and teams believe that the earlier a child starts training seriously in one sport, the better chance they have of becoming a star athlete, like Lionel Messi in football or LeBron James in basketball.

However, many experts warn that early specialisation can have serious drawbacks. Training too much at too early can lead to injuries, stress, and burnout. It can also take away the joy of playing and reduce time for free play, rest, and learning other skills.

### Recommendations

- **Play multiple sports:** Children should be encouraged to try different sports before choosing the one that they enjoy the most.
- **Include free play:** Unstructured play, like running, climbing, or casual games, helps build coordination and motor skills naturally.
- **Balance training:** Young athletes should not train more hours per week than their age (for example, a 12-year-old shouldn't train more than 12 hours a week).
- **Avoid overtraining:** Too much intense practice can cause injuries and mental exhaustion.
- **Build strength safely:** All young people can benefit from general fitness and strength-building exercises done under supervision.
- **Stay safe:** Coaches and parents must ensure young athletes are protected from any form of pressure, bullying, or abuse.

## Risks of Early Specialisation

Early specialisation can lead to:

- Overuse injuries (because of repeating the same movements).
- Burnout or loss of interest.
- Social isolation and less time with friends.
- Overdependence on coaches or parents.
- Stunted growth or delayed development.

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Children should enjoy multiple sports, explore different activities, and develop overall physical and mental strength before choosing to specialise in one sport. Exploring a variety of games helps develop balanced skills, confidence, and fitness. In fact, many top athletes did not specialise early; they focused on one sport only in their teenage years and often achieved better performance than those who specialised too soon.

### Activity

Discuss in groups:

- Do you think focusing on one sport at a young age is helpful or harmful?
- What might be a healthy way to balance fun, training, and rest for young athletes?

## Exercises

1. Why are weight categories used in some sports?
2. How does puberty affect strength and muscle development?
3. Do students of the same age differ in height and strength?

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Chapter 16

# Women in Sports

*In the history of India, warriors like Rani Laxmi Bai, Jhalkari Bai, and Devi Ahilya Bai demonstrated courage and physical prowess as they fought to protect the country and uphold their ideals.*

Women's participation in sports has increased gradually and female athletes continue to break records, challenge stereotypes, and inspire future generations.

Over the years, India has seen a huge rise in women's sports participation. Government programmes such as Khelo India and the National Sports Talent Search Scheme aim to encourage and support women athletes across the country.

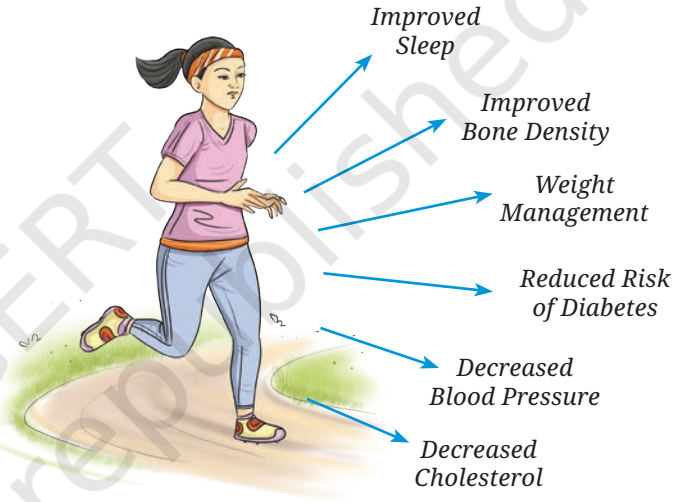


*Fig. 16.1:* Benefits of exercises in women

## Gender Equality and Progress in Sports

The Constitution of India ensures gender equality and works to eliminate any form of discrimination, including in sports. Despite this progress, women still face challenges like unequal pay, less media coverage, and limited representation in sports administration and leadership roles.

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However, India has achieved a significant milestone in this area. Both the Indian Olympic Association and the Indian Paralympic Committee are currently led by women.

To address this at a global level, the International Olympic Committee (IOC) has been actively working to promote equal participation of women in sports and related fields. In fact, the next Olympic Games are expected to have around 49 per cent women participants, marking a major step toward equality.

## Physical Benefits of Sports for Women

Regular participation in sports and physical activity provides numerous health benefits for women, including:

### Prevention of Lifestyle Diseases

Regular physical activity reduces the risk of diabetes, high blood pressure, and obesity, helping women maintain good health throughout life.

### Stronger Bones and Muscles

Women are more likely to suffer from osteoporosis (weak bones) than men. Sports and exercise help increase bone density and keep the skeleton strong.

### Improved Muscle Tone

Regular training and sports participation strengthen muscles, improve flexibility, and help maintain proper posture.

### Better Heart and Lung Health

Exercise improves blood circulation and oxygen supply to muscles. It strengthens the heart and allows women to perform physical activities for longer without fatigue.

### Weight Control

Obesity is a major health concern, and women are more likely to be affected than men. Active participation in sports helps maintain a healthy weight and body shape.

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## Psychological Benefits of Sports for Women

Sports have a strong impact on mental and emotional well-being. They help women become more confident, focused, and positive in life.

### Stress Management

Physical activity releases hormones like endorphins that reduce stress and improve mood. Active women handle pressure and emotional challenges better.

### Emotional Control

Through training and competition, women learn how to stay calm and composed under pressure, improving their emotional balance.

### Confidence and Self-esteem

Winning, improving performance, or even participating builds self-belief. Every achievement — big or small — boosts self-esteem and inspires women to aim higher.

### Leadership Skills

Sports teach leadership by encouraging teamwork, responsibility, and decision-making — skills that help women succeed both on and off the field.

## Social Benefits of Sports for Women

Sports not only improve health and confidence but also strengthen social relationships and community bonds.

### Communication

Sports encourage players to express themselves clearly and communicate with teammates and coaches, improving social, and verbal skills.

### Teamwork and Cooperation

Women learn to work together, respect others, and cooperate to achieve common goals — important qualities for both sports and life.

### Coordination and Relationships

Team sports improve coordination and teach how to build healthy relationships with teammates, officials, and the community.

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### Social Inclusion

Sports bring women from different backgrounds together, promoting equality, understanding, and mutual respect.

## Special Considerations in Women's Sports

While we work to encourage more women to participate in sports, it's also important to understand the unique physiological aspects of female health that can affect athletic performance and participation.

### Menarche – The Beginning of Menstrual Cycle

Adolescence is a stage of life marked by rapid physical and biological changes that lead to sexual maturity. For girls, one of the most important phases of this stage is menarche, or the first menstrual period.

Menarche usually occurs between the ages of 8 and 15 years, though this can vary for every individual. It marks the time when a girl's body becomes capable of reproduction. This process is a natural part of growth and is linked with the development of secondary sexual characteristics, such as breast growth and widening of pelvic girdle.

Many factors can affect the timing of menarche, including:

- Genetics (family history)
- Nutrition and health
- Physical activity and body weight
- Socio-economic and environmental conditions

### Activity

- Let us plan a talk show in which our classmates will discuss how our schools should encourage girls to participate in sports and games.
- Let us organise an awareness programme in our neighbourhood to highlight the benefits of sports for women.
- Talk to our parents after dinner time about how our family has supported their daughters in pursuing athletic goals.
- Let's prepare a poster of those sports which are offering equal prize money to the winners regardless of gender, mention the amount and display it in an appropriate place.

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### Understanding Menstruation

Menstruation (often called a "period") is the monthly shedding of the uterine lining through the vagina.

- Periods typically last 3 to 7 days, though more commonly 3 to 5 days.
- A normal menstrual cycle occurs every 21 to 35 days.
- Women typically have periods until the age of 45–55 years, after which they experience menopause, meaning the natural end of menstruation and fertility.

Menstrual health is an important part of overall well-being. Regular cycles are a sign of a healthy reproductive system.

## Menstrual Dysfunction

Sometimes, women and young girls experience irregularities or problems in their menstrual cycle. These are called menstrual dysfunctions.

A normal menstrual cycle happens once every 21–35 days. If it occurs more often, less often, or causes extreme pain or bleeding, it may indicate a problem.

### Common Causes

- Overweight or underweight
- Stress and anxiety
- Poor diet or eating disorders
- Sudden changes in physical activity or training schedules
- Hormonal imbalance or certain illnesses

### Types of Menstrual Disorders

#### Pre-Menstrual Syndrome (PMS)

- Emotional and physical symptoms before periods such as mood swings, headaches, tiredness, and irritability.
- Can be managed through exercise, healthy diet, and enough rest.

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**Amenorrhea**

- **Primary Amenorrhea:** When menstruation does not start by puberty.
- **Secondary Amenorrhea:** When a woman misses her periods for three months or more after they have started.

**Dysmenorrhea**

- Painful periods with cramps, backache, or fatigue.

**Menorrhagia**

- Very heavy or prolonged bleeding during periods.

**Polymenorrhea**

- Periods occurring too frequently (less than 21 days apart).

**Oligomenorrhea**

- Infrequent periods, more than 35 days apart.

**Metrorrhagia**

- Irregular bleeding between periods.

**Postmenopausal Bleeding**

- Bleeding that happens after menopause (after a woman has stopped menstruating).

## The Female Athlete Triad

While sports bring many health benefits for girls and women, some athletes face health issues due to imbalanced diet and training.

One such condition is called the Female Athlete Triad, first described by the American College of Sports Medicine (ACSM) in 1992.

The triad includes three interrelated conditions:

1. Low Energy Availability (with or without eating disorder)
2. Menstrual Dysfunction (absence or irregularity of periods)
3. Low Bone Mineral Density (weak bones)

These three are connected and often occur together in athletes who train intensely but don't eat enough to meet their body's energy needs.

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### Low Energy Availability

This happens when athletes do not eat enough food to balance the energy they spend during exercise.

- It may occur due to dieting, fear of weight gain, or eating disorders such as:
  - **Anorexia Nervosa:** An extreme fear of gaining weight, leading to eating very little or over-exercising.
  - **Bulimia Nervosa:** Eating large amounts of food and then using unhealthy methods to remove calories, such as vomiting or using laxatives.
- Common symptoms include fatigue, weight loss, stress fractures, irregular periods, anxiety, and weakness.

  Proper nutrition and professional guidance can prevent or correct this condition.

### Low Bone Mineral Density (BMD)

Bone health depends on proper nutrition, hormones, and exercise. When women have low oestrogen levels or poor diet, bones become fragile and weak, a condition known as osteoporosis.

- This can cause stress fractures, pain, or deformity later in life.
- Bone growth and strengthening happen mainly during childhood and adolescence, so maintaining proper diet and physical activity during these years is vital.

  Sports are not just about winning medals or breaking records. For women, they represent freedom, empowerment, and the opportunity to challenge stereotypes. Every girl who picks up a cricket bat, laces up running shoes, or steps onto a basketball court is making a statement about her capabilities and her right to participate fully in society.

## Myths and Taboos

A common myth is that girls should not exercise during their period. But in truth, light exercise often helps reduce cramps and improve mood. Even Olympic champions compete during menstruation. What matters is comfort, hygiene, and listening to your own body.

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As we grow, remember: body changes, emotions, and thoughts during adolescence are all natural. Respect traditions, but also question and understand them scientifically. Knowledge is what helps you grow confidently.

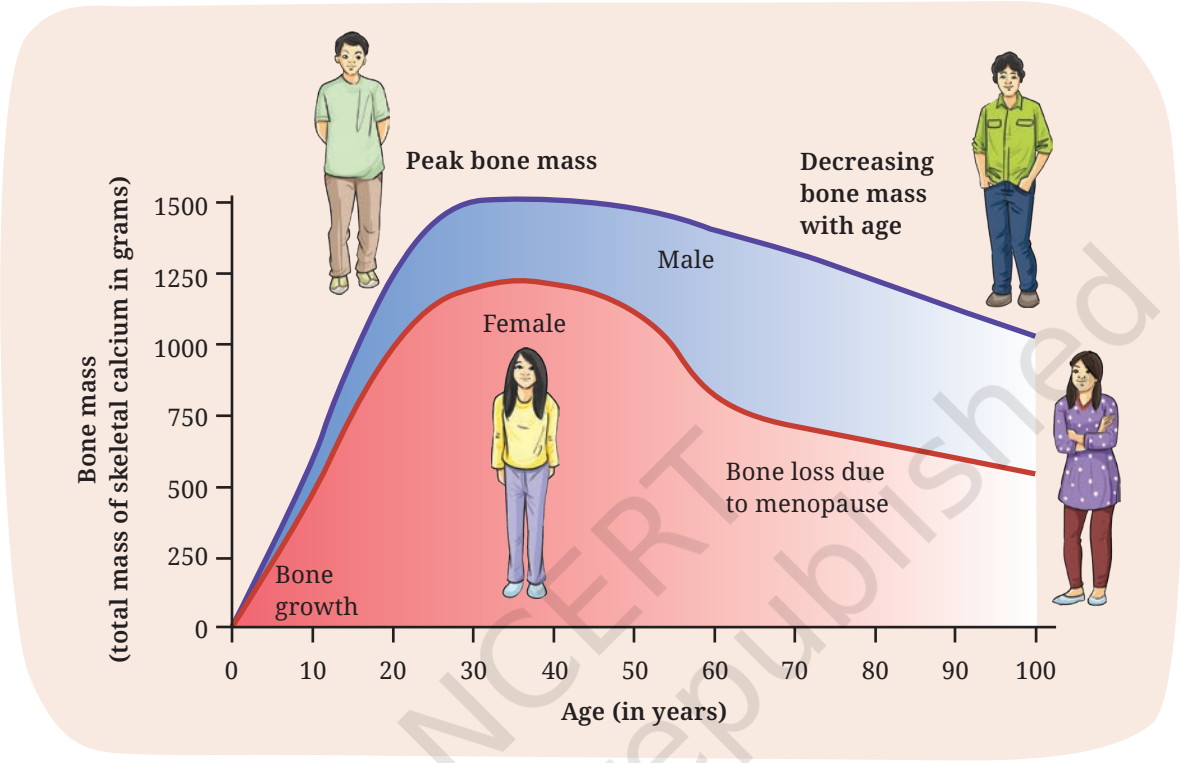


*Fig. 16.2*

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Chapter 17

# Age is Just a Number

*Fauja Singh was a British Sikh marathon runner of Indian origin and an inspiration for people of all ages. He was born on April 1, 1911, in Beas Pind village, Jalandhar, Punjab. During his childhood, he was weak and could not walk properly until the age of five. He worked as a farmer for most of his early life.*

*After the death of his wife and son, Fauja Singh moved to England and took up running to overcome his grief. At the age of 89, he started training seriously and completed his first marathon in 2000 at the London Marathon. He went on to run marathons in London, Toronto, and New York.*

*In 2011, at the age of 100, Fauja Singh became the first centenarian to complete a full marathon at the Toronto Waterfront Marathon. He also set multiple world age-group records in track events. Known as the "Turbaned Tornado", he promoted fitness culture through sports.*

*Fauja Singh retired from competitive running at the age of 101. His life proves that age is not a barrier to physical fitness and that regular exercise promotes both physical and mental well-being.*

Have you noticed that many people today stay active and energetic even as they grow older? In recent years, the average age of participants in endurance sports such as long-distance running, cycling, and swimming has increased. Many older athletes train regularly, follow healthy routines, and set personal goals to keep themselves motivated. Their example shows that with the right attitude and care, the human body can remain strong and active for decades. It reminds us that staying active keeps both the body strong and the mind fresh—age may bring changes, but it does not have to limit our abilities or dreams.

As people grow older, the body naturally changes. Muscle strength, balance, and energy levels may gradually decrease, and some people become less active. This can increase the risk of health

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problems such as heart disease, diabetes, obesity, and weak bones. However, regular physical activity can slow down these changes and help older adults live longer, healthier, and more independent lives. That is why exercise is often called "the best medicine for ageing".

Staying active in later years does not always mean playing competitive sports. It can include simple and enjoyable activities like walking, swimming, yoga, cycling, gardening, or light exercises at home. The key is to keep moving regularly and choose activities that feel enjoyable and safe.

Healthy ageing means living an active, independent, and meaningful life as we grow older. It involves maintaining physical fitness, mental alertness, and emotional well-being so that people can continue doing the things they value — such as travelling, meeting friends, or playing with grandchildren. This depends not only on a person's own health and habits but also on having a supportive environment that encourages activity and social connection.

## Benefits of Physical Activities for Older Adults

People of all ages can gain from regular physical activity, and this is especially true for older adults — even small amounts of movement can make a meaningful difference. Here are some important benefits:

*Fig. 17.1:* Benefits of exercises in older population

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### Stronger Heart and Better Circulation

- Exercise strengthens the heart and improves blood flow.
- It helps control blood pressure and cholesterol.
- Moderate aerobic or endurance activity can reduce the risk of stroke.

### Healthy Lungs

- Regular physical activity improves lung strength and breathing capacity.
- It reduces the risk of chest infections and helps older people stay active longer.

### Better Diabetes Control

- Physical activity helps control blood sugar levels and prevents type 2 diabetes.
- It makes the body use insulin more efficiently, reducing the need for medicines.

### Stronger Joints and Bones

- Regular movement keeps the joints flexible and prevents stiffness.
- Exercise reduces the risk of arthritis and osteoporosis (weak bones).
- Activities like walking, yoga, and light resistance exercises strengthen the bones.

### Prevention of Falls

- Balance and strength training exercises help prevent falls, which are common among older adults.
- Programmes like the Otago Exercise Programme include balance and walking exercises that keep seniors steady and confident.

### Mental and Emotional Health

- Exercise boosts mood, reduces stress, and helps fight depression.
- It improves memory and brain function, lowering the risk of dementia and cognitive decline.
- Physical activity makes people feel more energetic and positive about life.

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## Activity

Talk to your grandparents, neighbours, or any older person you know and learn about the games or sports they used to play when they were young.

Find out:

1. Which games or sports did they enjoy most?
2. Why did they stop playing regularly?
3. Do they still play or stay active in some way today?
4. What did sports teach them about life?

Present their sporting journey to your class and discuss what you learned about sports, ageing, and staying active throughout life.

## Safety and Precautions

Older adults should always consult a doctor before starting a new exercise programme, especially if they have heart or joint problems. Some safety tips include:

- Start slowly and increase the intensity and frequency of the activity gradually.
- Warm up and cool down properly.
- Stay hydrated and wear comfortable shoes.
- Avoid very heavy or high-impact exercises.
- Exercise regularly, not occasionally.
- Doing light activity consistently brings great benefits.

Sports and physical activity play a vital role in healthy ageing. Staying active helps older adults remain fit, happy, and independent. Regular exercise strengthens the body, sharpens the mind, and uplifts the spirit.

Age should never be seen as a barrier to movement. Whether young or old, everyone benefits from being active. Sports and exercise keep life meaningful, healthy, and joyful — at every age!

**DID YOU KNOW?**

Much of the physical decline often associated with ageing is actually caused by sedentary lifestyles and the development of medical conditions rather than ageing itself.

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## Activity

Learn a game that your grandparents, neighbours, or elders used to play when they were young. Ask them to explain the rules, equipment, and how it is played.

Teach this game to your classmates and play it together.

Then discuss amongst yourselves,

1. What did you enjoy about the game?
2. How is it different from the games you usually play?
3. What skills does it develop?

## Exercises

1. List five benefits of regular physical activity for older adults.
2. How does exercise help in preventing heart disease and diabetes?
3. Exercise is called “the best medicine for ageing”. Justify your answer.

## Check Your Progress

### Answer in brief

1. Suggest three ways your school can promote inclusiveness in sports.
2. Design one inclusive game and explain how it ensures teamwork and fairness.
3. How do sports help persons with disabilities in building their confidence and independence?
4. What barriers commonly prevent persons with disabilities from participating in sports?
5. What changes in “Equipment” can help students with visual impairments participate in games?
6. How can pairing students (People component of STEP) encourage teamwork and empathy?
7. Do you agree or disagree with early specialisation in sports? Justify your answer.

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8. Compare the benefits and risks of competitive sports for young athletes.
9. What lifestyle changes can help prevent menstrual disorders in young athletes?
10. Suggest a safe weekly exercise plan for a 65-year-old person, and what precautions should older adults follow while exercising?
11. How can families encourage older members to stay active?

## Answer the following in detail

1. How is sports a tool for peace and equality? Explain.
2. Analyse how sports contribute to happiness, togetherness, and good health in society.
3. Compare the Olympic and Paralympic Games in terms of values and opportunities.
4. Which barrier do you think hinders participation the most—financial, infrastructural, or social? Justify your answer.
5. Compare general etiquette and disability etiquette. Are they different or interconnected?
6. Analyse how the STEP Model improves participation and learning outcomes.
7. Do you think awareness about disability etiquette should be compulsory in schools? Justify your answer.
8. Why is enjoyment and participation more important than early success?
9. Design a weekly fitness routine suitable for adolescent girls focusing on health and safety.
10. How can awareness about the Female Athlete Triad prevent long-term health problems?
11. Do you think age limits should exist in all sports? Justify your answer.
12. Compare the benefits of sports for young people and older adults.

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UNIT

5

# Sports

0918UN05

*This unit introduces students to the wide and exciting world of sports and physical activities, highlighting their importance in maintaining a healthy and active lifestyle. It begins by focusing on India's rich heritage of indigenous martial arts such as Thang-Ta, which combines body movements, breathing techniques, and weapon skills to develop physical control and mental balance. These traditional practices reflect cultural values and promote discipline and self-defence.*

*The unit further explores various traditional Indian sport and martial arts like Mallakhamb, Gatka, and Kalaripayattu. These activities not only improve strength, flexibility, and coordination but also teach focus, courage, and respect. They serve as an important link between physical training and cultural traditions, helping students understand the significance of India's historical sporting practices.*

*In addition, the unit covers modern and international sports, including combat sports like Judo, Wrestling, Taekwondo, and Boxing, as well as popular games like Hockey, Basketball, and Cricket. It also introduces individual sports like Archery, Tennis, explaining their fundamental skills.*

*Overall, this unit aims to develop awareness about the role of sports in building physical fitness, mental strength, teamwork, and sportsmanship. It encourages students to actively participate in different sports and appreciate their value in personal development, cultural understanding, and leading a balanced and healthy life.*

*This unit commences with introduction to gymnastics and swimming which is considered as the foundation of multiple sports.*

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# Gymnastics

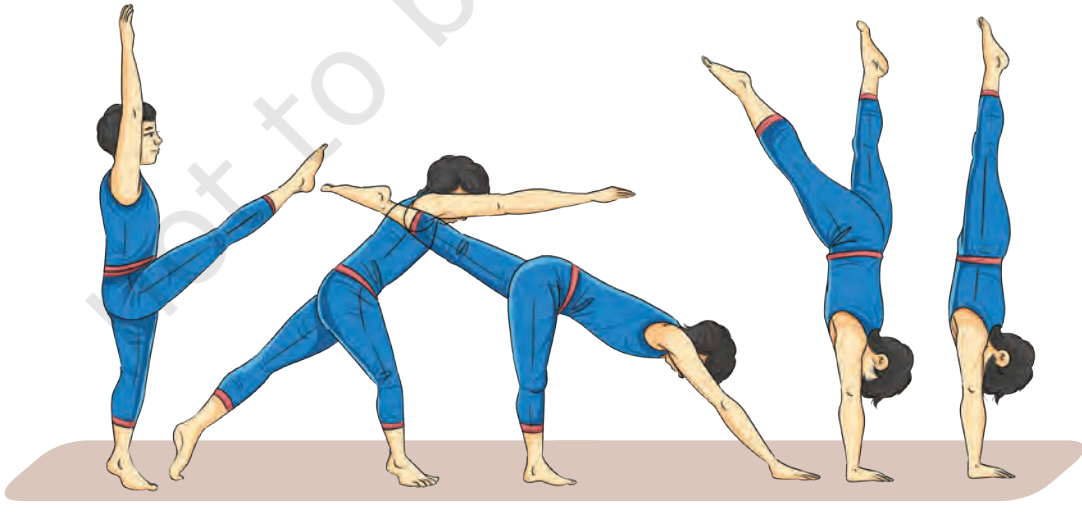
The word gymnastics has been derived from the Greek word *Gymnos* meaning "naked art". In ancient Greek, the word Gymnastics was used to denote the exercise done with the naked body. Friedrich GutsMuths, is known as the Grand Father of Modern Gymnastics and Friedrich Ludwig Jahn is known as the Father of Gymnastics. Modern gymnastics is regulated by the Federation International de Gymnastique (FIG) which was founded in 1881. Gymnastics was included in the Modern Olympic Games in 1896 and women's gymnastics was introduced in Olympic Games in 1928. The first gymnastics World Cup was organised in 1975. At present, gymnastics as an event can be seen in almost all prominent multi sports meets.

**Types of Gymnastics**

Broadly gymnastics has been classified in seven types:

- Artistic Gymnastics
- Rhythmic Gymnastics
- Trampoline Gymnastics
- Acrobatic Gymnastics
- Parkour Gymnastics
- Tumbling Gymnastics
- Aerobics Gymnastics

This chapter deals with artistic gymnastics which is a popular discipline of gymnastics. Artistic gymnastics apparatus for men are floor exercise, pommel horse, roman rings, vaulting table, parallel bars, and horizontal bar. For women, the apparatus are vaulting table, uneven bars, balancing beam and floor exercises.



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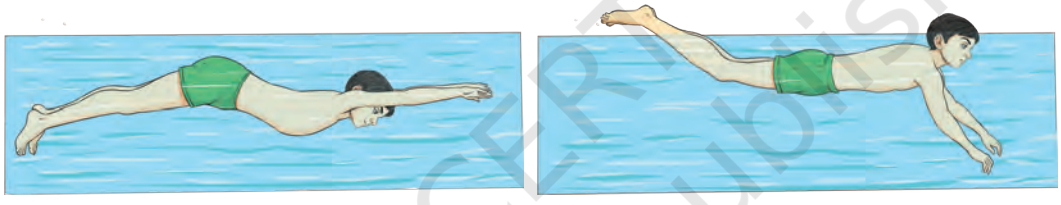
# Swimming

Swimming is a sport where a person propels their body through the water with their arms, called strokes, and legs kick and move progressively through water. It is sometimes used for physical rehabilitation of people recovering from injuries because it is a non-weight bearing exercise. It is also a good recreational activity. Swimming was included in the first modern Olympic Games at Athens in 1896. Diving events were added in 1904. The women's competitions were recognised in 1912. Federation Internationale de Natations Aquatics (FINA) was formed at London Olympic Games in 1908.

| Types of Strokes |
|---|
| Front Stroke/ Freestyle |
| Back Stroke |
| Breast Stroke |
| Butterfly Stroke |



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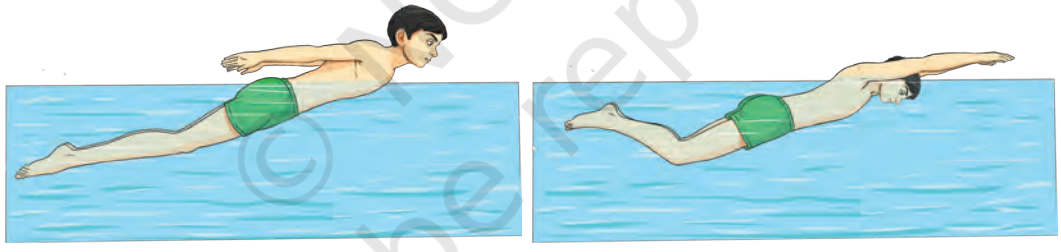

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## The following should be kept in mind before and after swimming

- Take bath before and after swim.
- Wipe your body after shower with a clean towel.
- Swim under the presence of a lifeguard and proper safety equipment.
- Do not go into deep water if you are not confident.
- Warm up before swimming.
- Stretching and mobility exercises should be done before and after swimming.

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Chapter 18

0918CH18

# Indigenious Martial Arts and Sport

## Indigenious Martial Arts

### Thang-Ta

A fine combination of body, breath and blade is an indigenous martial art of Manipur in Northeast India, where thang stands for sword and *ta* stands for spear. Various external weapons are integrated in this skill i.e. the sword, spear, dagger, etc. — it's a manifestation of physical control through soft movements coordinated with the rhythms of breathing. It is an elaborate system of physical culture that involves breathing methods, meditations, and traditions. The other name for Thang-Ta is *Huyen Lallong* (method of safe-defense). Any individual all alone or with a partner can practice various sword drills for learning and training fundamental strokes and footwork.

#### Skills

Basic Stance – Stand with feet shoulder width apart.

Footwork – Turn to the left, pivoting on the balls of both feet. The feet should form an approximately forty-five degree angle. The body will bend in front until the toes of the left foot are aligned with the knee and the chin. The body of the player should form a straight line from the back of the head down to the right heel. This is also called the *Singh Mudrā* or Lion's Posture.

Another skill of thang ta which is played without any armory is known as Sarik Sarat it is taught after competence in weapons was gained. It uses the foot and hand as a form of weapon.

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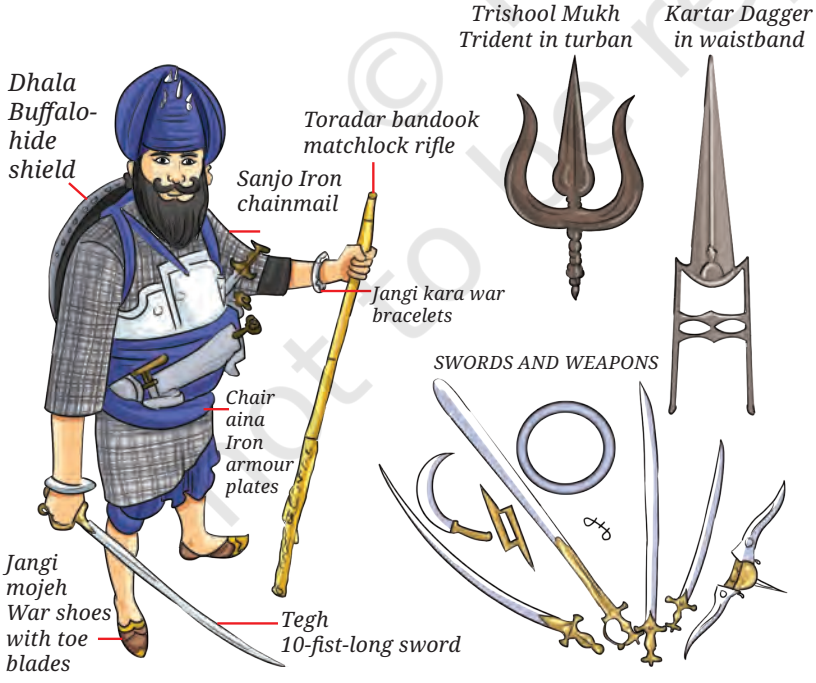
## Gatka

Derived from the Sikh history, Gatka (refers to a wooden stick whose traditional name is *Soti* intended to simulate a sword) is an ancient Indian martial art which remained an integral part of the traditional Guru Parampara in Sikh Shastra Vidhya (skill to use weapon). During the 16th century the Sixth Guru Hargobind sahib Ji (1595–1644) initiated this historical art of self-defense. Later in the 17th century, Guru Gobind Singh ji, known as master of weaponry, developed it further and made it a compulsory part of the Sikh tradition. The word Gatka is of Indian origin and refers to a defensive weapon technique. *Mahan Kosh* edited by Bhai Kahan Singh Nabha, explains; Gatka a three-hand span stick, used to teach the initially of club fighting. Gatka associated with the Sikh Gurus, is now being recognised as a sport nationwide. Gatka is a combative sport between two or more players. RASMI (symbolic and traditional) and KHEL (competitive sport) are the two ways to enjoy this traditional art of sport reformed in the beginning of 19th century. International Rules for Gatka games are formulated by the World Gatka Federation. Gatka equipment used in demonstrations and competitions are stick and *farri*, *chakra* and chain, *dhaal* and *kripaan*, *khanda* and *kataar*, *talwar* and mace, *teer* and *dang*, etc.




The concept of soul teaching in Gatka training reflects in our day-to-day living. Realising the importance of time, taking quick and right decisions at the time of real need, not intruding in anyone's rights, not surrendering against evil deeds, living a simple and a principled life are qualities that come easily in a Gatkabaj.

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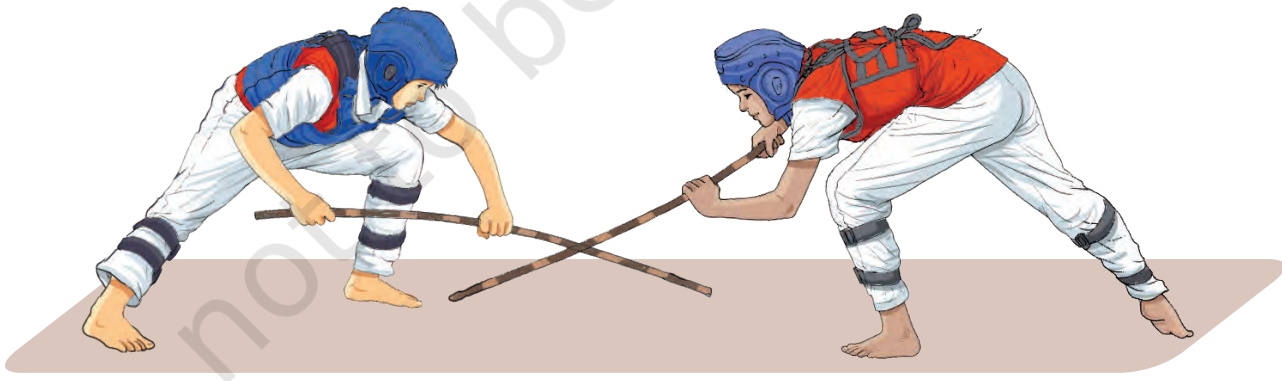
## Kalaripayattu

Kalari means a space where one gets training and Payattu means practising. References cited in the Vedas prove that *Kalaripayattu* has existed for 3,000 years, with deep roots in the social and cultural life of Keralam. Like yoga *āsanas*, *Kalaripayattu* is also inspired by the movements and stances of animals such as boar, lion, raptors, elephants, etc., and was primarily developed to counter wildlife. The British banned the practice, fearing it might make Indian citizens physically strong, emotionally balanced and mentally stable. Despite such restrictions, a few dedicated masters safeguarded this ancient art by practising it in isolation and secrecy, and it was resurrected after independence.

With strong principles at its foundation, *Kalaripayattu* develops balance and flexibility of mind and body, emphasising speed, agility, co-ordination and discipline. It also aids in reducing psychological disorders like stress, anxiety, and tension.

Traditionally, advanced students of *Kalaripayattu* are imparted knowledge of *marma-sthānam* — the vital points of the body, which include muscular, vascular, ligamentous, bone and joint-related locations. This deepens their understanding of the body's functioning and is complemented by medicinal and therapeutic practices that are integral to the training.



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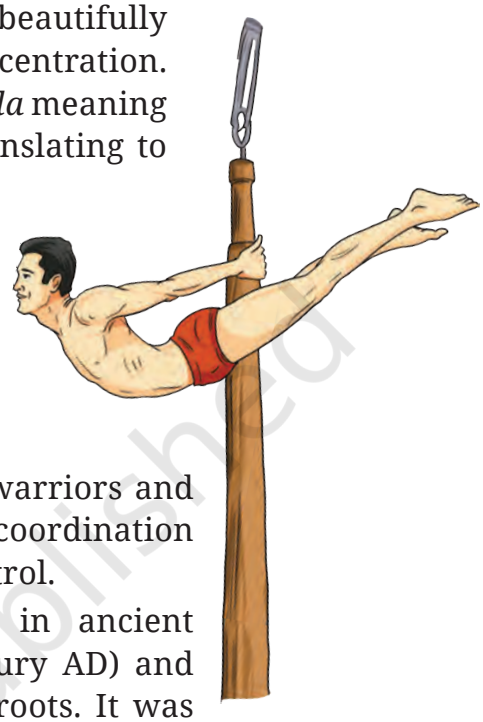
## Indigenious Sport

### Mallakhamb



Mallakhamb is a Indian traditional game that beautifully blends strength, flexibility, balance, and concentration. The term comes from two Sanskrit words — *Malla* meaning wrestler, and *Khamb* meaning pole — thus translating to "Wrestler's Pole". Originating in ancient India, Mallakhamb was an essential part of the Gurukul-era physical training system, designed to build strength, focus, and discipline among students. It served as a vital link between Yoga, martial arts, and wrestling, combining physical mastery with spiritual growth. Practiced in Gurukuls and *Akharas*, it helped warriors and wrestlers enhance agility, endurance, and coordination while promoting inner balance and mental control.

Historically, Mallakhamb finds mention in ancient Sanskrit texts such as *Manasollasa* (12th century AD) and *Vyayam Dipika*, highlighting its deep cultural roots. It was revived during the reign of Bajirao Peshwa II (1796–1818) by his court gymnast Balambhat Dada Deodhar, to train soldiers for battle. During the early 20th century, stalwarts like R. V. Bhogle, K. B. Boksekar, and Pt. Babasaheb Natu popularised it across India.

Today, Mallakhamb has evolved into a modern competitive and artistic sport, performed by both men and women on wooden poles, ropes, or hanging apparatuses, where yogic and acrobatic postures are displayed with rhythm and grace. Mallakhamb helps in the all-round development of the body and mind. It improves muscular strength and endurance, balance and co-ordination, flexibility and agility, concentration and self-control, courage and confidence.

Mallakhamb has gained official recognition — declared the State Sport of Madhya Pradesh (2013) and featured in the Khelo India Games and 36th National Games (2022). Today, it has spread globally to countries like Germany, the USA, Japan, Italy, and the UK, symbolising India's ancient wisdom in a modern athletic form with minimum cost.

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Chapter 19

0918CH19

# Combat Sports

## Judo

Judo has its origin in the ancient Japanese art of (*Jiu-Jitsu*) (gentle art), a system of hand-to-hand combat. It is a sport of Asian origin which was included in Tokyo Olympic Games in 1964. The first school of Judo was started by Professor Jigoro Kano in 1882 at Eishoji (a Buddhist temple) in Tokyo, Japan. As a player progresses through the ranks (grading reflected by the color of the belt of the Judo player) and the very nature of the grading system ensures that the next goal is always realistic and achievable with effort.

The Judo bouts are played in different weight categories for equality and to avoid injuries because body weight has direct relation with body inertia, mass and strength (force) of an individual. Competitions are held in sub-junior boys/girls, junior boys/girls and senior men/women with different weight categories.

| Following are the weight categories in Olympic events | |
|---|---|
| Men | -60 kg \| -66 kg \| -73 kg \| -81 kg \| -90 kg \| -100 kg \| +100 kg |
| Women | -48 kg \| -52 kg \| -57 kg \| -63 kg \| -70 kg \| -78 kg \| +78 kg |

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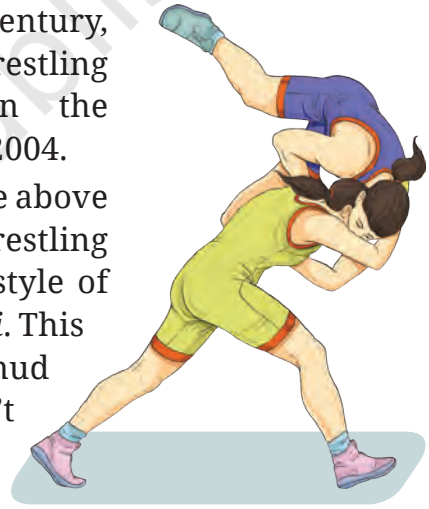
## Wrestling

There are two Olympic styles of wrestling, Freestyle and GrecoRoman. With one key exception, the rules of the two styles are identical.

In Greco-Roman, a wrestler may not attack his opponent's legs, nor use his own legs to trip, lift or execute other moves. In freestyle, both the arms and legs may be used to execute holds or to defend against attack.

Greco-Roman style was introduced in the first modern Olympic (Athens, 1896), while Freestyle wrestling was introduced in 1904 at St. Louis Olympic Games. After a century, women free style wrestling was introduced in the Athens Olympics in 2004.



In addition to the above one more style of wrestling is played in India which is called the Indian style of wrestling or popularly called *Pehlwani* or *Kushti*. This kind of wrestling takes place in a clay or a mud pit (*Akhada*). Traditional Indian wrestling isn't just a sport, it's an ancient sub-culture where wrestlers live and train together.

| Following are the weight categories in Olympic events | |
|---|---|
| Men's Freestyle | 57kg, 65kg, 74kg, 86kg, 97kg, 125kg |
| Women's Freestyle | 50kg, 53kg, 57kg, 62kg, 68kg, 76kg |
| Greco-Roman (Men's) | 60kg, 67kg, 77kg, 87kg, 97kg, 130kg |

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## Taekwondo

Taekwondo is a Korean martial-arts-turned-olympic-sport practiced globally. Through consistent practice, this discipline helps people improve their spirit and quality of life by strengthening both the body and the mind. The deeper meaning of *Taekwondo* is reflected in the term itself: *Tae* means foot or to step on, *Kwon* means fist or fight, and Do means the way or discipline. When combined, they symbolise the skill of using one's fists and feet in a controlled way to promote self-control and peace as opposed to violence. Fundamentally, Taekwondo teaches that harmony and peace are the ultimate aims of both martial and human development.

Taekwondo, originally called *Subak* or *Taekkyon*, originated in Korea and was used as a physical training and self-defence technique. Later, during the Koguryo kingdom, it evolved into *Sunbae*, and during the Shilla period, it joined *Hwarangdo*, which concentrated on creating honourable leaders for the country. *Taekwondo* evolved during 1940s and 1950s in Korea from ancient Korean martial arts practiced during the Three-Kingdom era and was formalised through the establishment of the World *Taekwondo* Federation (WTF) in 1973 later renamed as World *Taekwondo* (WT).

| Following are the Taekwondo categories in Olympic events | |
|---|---|
| Men's Taekwondo | Women's Taekwondo |
| Flyweight (58kg/128 lbs) | Flyweight (49kg/108 lbs) |
| Featherweight (68kg/150 lbs) | Featherweight (57kg/126 lbs) |
| Welterweight (80kg/176 lbs) | Welterweight (67kg/148 lbs) |
| Heavyweight (80+kg/176+ lbs) | Heavyweight (67+kg/148+ lbs) |

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## Boxing

Boxing is a combat sport of skill, strategy, and athleticism. It is one of the world's oldest sports, with ancient roots in civilisations like Greece and Rome. Modern boxing developed in England with the establishment of the Marquess of Queensberry Rules in 1867, which introduced gloves and rounds. The sport is contested between two opponents in a ring, aiming to land punches on the opponent while avoiding their attacks. India has a rich boxing tradition, with legends like Mary Kom, a six-time world champion and Olympic bronze medalist, Vijender Singh, who won India's first Olympic boxing medal (bronze) in 2008, and Lovlina Borgohain, who clinched a bronze medal at the 2020 Tokyo Olympics, cementing India's place in world boxing.

| Following are the Boxing categories in Olympic events | |
|---|---|
| Men's | Women's |
| Flyweight (52kg) | Flyweight (51kg) |
| Featherweight (57kg) | Featherweight (57kg) |
| Lightweight (63kg) | Lightweight (60kg) |
| Welterweight (69kg) | Welterweight (69kg) |
| Middleweight (75kg) | Middleweight (75kg) |
| Light heavyweight (81kg) | |
| Heavyweight (91kg) | |
| Super heavyweight (+91kg) | |

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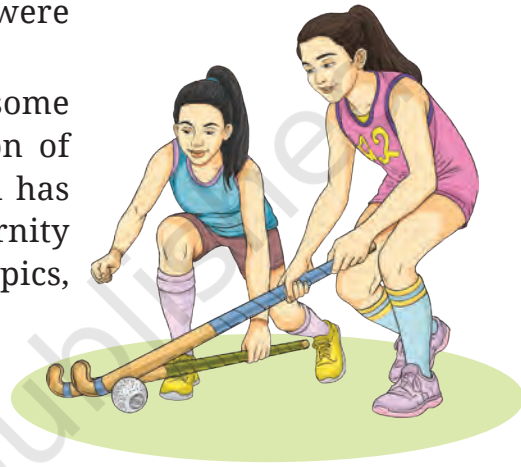
Chapter 20

0918CH20

# Outdoor Sports

## Hockey

Do you know what Indian Hockey players were doing on 7 November 2025?



Whole Indian Hockey Players and some sports enthusiast celebrated the completion of 100 glorious years of Indian Hockey which has brought accolade for Indian sports fraternity many a times by conquering medals in olympics, world championship, asian championship, asian games, commonwealth games, etc. Infact not only our mens but our women team also scripted the story of success at global platform in the hockey. Lets us learn about the hockey.

The first Hockey club was formed in Kolkata in 1885. The Hockey Association was founded in 1886. The first international tournament took place in 1895 and the International Rules Board was founded in 1900. The International Hockey Federation is the global governing body of field hockey founded on 7 January 1924 in Paris. India won all five Olympic Games from 1928 until 1956 and then again won in 1964 and 1980. In 1976 Montreal Olympics, artificial turf was used for the first time and that resulted in development of new tactics and techniques and also modification in rules.

**Chronology of Indian Gold Medals in Olympic Hockey (Men's category)**

| Olympics | Captain |
|---|---|
| Amsterdam 1928 | Jaipal Singh Munda |
| Los Angeles 1932 | Lal Shah Bokhari |
| Berlin 1936 | Dhyan Chand |
| London 1948 | Kishan Lal |
| Helsinki 1952 | K.D. Singh |
| Melbourne 1956 | Balbir Singh Sr |
| Tokyo 1964 | Charanjit Singh |
| Moscow 1980 | Vasudevan Baskaran |

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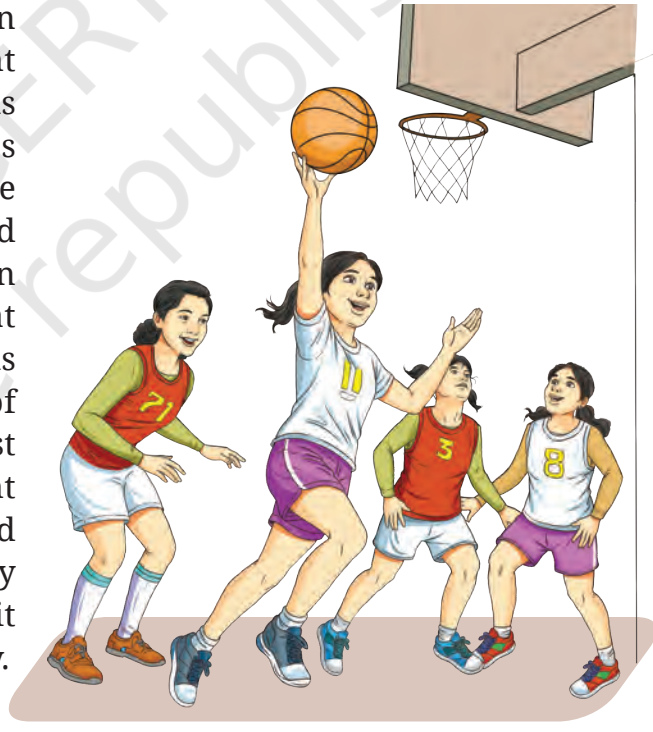
# Basketball

Basketball is a fast, free-flowing, high-scoring team game. The players shoot a ball through a basket to score points while following a set of rules. They play on a marked rectangular court with a basket fixed on each end. Basketball is one of the world's most popular games. The rules allow all players to move freely around the court and occupy any position. All players have an equal opportunity to score a Basket. To play basketball, students should learn and practice the basic skills of dribbling, passing, receiving and shooting.

The game of basketball originated at the Springfield College of Physical Education, Massachusetts, USA in 1891, invented by Dr. James Naismith. In 1894, Naismith fixed the first 13 rules which still form the basis of modern basketball. In India, the Young Men's Christian Association (YMCA) at Kolkata introduced basketball for the first time. Later the YMCA established at Madras in 1920 played an important role in the development of this game. Today basketball is one of the most favourite games in many schools and colleges. The game is played by both men and women of all ages and ability. In order to promote Basketball at national and international levels the Basketball Federation of India was set up in 1950. The first National Basketball Tournament was held in Delhi in 1934 and thereafter it was organised every two years until 1951. After that it started being organised annually.



| Duration of the match (total 4 Quarters) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Quarter 1 | Rest | Quarter 2 | Half time | Quarter 3 | Rest | Quarter 4 | Extra time |
| 10 min | 2 min | 10 min | 15 min | 10 min | 2 min | 10 min | |

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## Cricket

Cricket is a bat and ball game played between two teams on a field. In the centre of the field is a rectangular pitch. One team bats, trying to defend the wicket and scoring as many runs as possible. The other team bowls and fields, trying to dismiss the batter and thus limiting the runs scored by the batting team. Run can be scored by the striking batter hitting the ball with the bat, running to the opposite end of the pitch and touching the crease there without being dismissed. The teams switch between batting and fielding at the end of an inning.

The name of Imperial Cricket Conference was changed to International Cricket Conference (later, Council) to enable countries outside the Commonwealth to become its members. Earlier only test matches were played where each team played two innings in five or lesser days. First One day International match was played in 1971 with limitations of overs per inning. The governing International Cricket Council (ICC) saw its potential and staged the first limited over Cricket World Cup in 1975. In the 21st century, a new limited over form, Twenty-20 and more recently IPL (Indian Premier League), has made an immediate impact. Cricket was brought to India by the British. An England team toured India in 1902-03. An All-India team went on a tour of England in 1911 under Maharaja Bhupinder Singh of Patiala. The came into being towards the end of 1928. India entered the international arena and played its first official Test against England in 1932. Meanwhile Prince Ranjit Singh of Nawanagar who had gone to England for further studies, made a remarkable name for himself in the game of cricket. He will always be remembered through the National Cricket Championship known as Ranji Trophy.

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# Archery

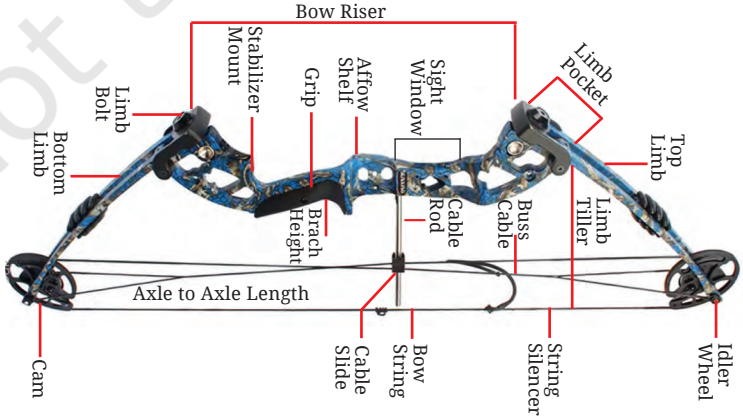
One of the oldest sports still being played is archery. This section will take you on a journey through human history as well as the development of archery. All around the world, there is evidence of archery being practiced in one form or the other.

Throughout ancient India, archery was revered and considered a sacred, secret, and mysterious art form. The sheer mention of archery makes Indians feel proud, as it is closely associated with our illustrious history and national honour. It is popular and widely practiced, whether as a part of religious celebrations or as a sport and form of entertainment. The creativity and perfection attained by Indian archers centuries ago are extensively described in the two great epics of India, the Ramayana and the Mahabharata.

In context with the modern olympic movement, Archery first appeared in the Olympic Games in 1900, was contested again in 1904, 1908, and 1920, then again—after an absence of 52 years—from 1972 to the present.

## Modern competitive archery

The International Olympic Committee recognises the World Archery Federation (WA), which was originally known as FITA (*Fédération Internationale de Tir à l'Arc*) and is made up of 156 national federations and other archery bodies. There are numerous additional organisations with distinct regulations.




*Bow*

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## Softball

Softball is said to have begun — indoors, actually — in 1887 on Thanksgiving Day in Chicago. A group of men had gathered together at Chicago's Farragut Boat Club. During the merriment a reporter from the Chicago Board of Trade, George Hancock, tied up a boxing glove (with its own strings) into a sphere, took a broomstick handle, and marked lines on the floor using chalk. That night 80 runs were scored in the game that took place and thus the sport was born. The first rulebook is said to have been issued (by Hancock) in 1889.

In 1895, Lewis Rober Sr. moved the game to a vacant lot outside the Minneapolis, Minnesota firehouse he worked at, so that the firefighters could get some exercise while waiting for an alarm. It was known at that time as 'kitten league ball,' which was later shortened to 'kitten ball.' In 1922 the name 'kitten ball' was first changed to 'diamond ball.' In 1926 the term 'softball' was used, when Walter Hakanson of the YMCA (Young Men's Christian Association) of Denver, Colorado conceived it while attending a meeting to form the Colorado Amateur Softball Association. In 1933 the first-ever national amateur softball tournament took place in conjunction with Chicago World's Fair and soon after, the reporter who wrote about the event, Leo Fischer, helped establish the Amateur Softball Association (ASA). In 1952 the first meeting was held for the International Softball Federation (ISF), which would govern the sport around the world, and the first world championship took place in 1965, when women's teams from five countries competed in Australia. One year later, the first Men's World Championship was played in Mexico.

### Major Tournaments and Events

- **Olympic Games:** Women's softball featured in 1996, 2000, 2004, 2008, 2020.
- **Women's College World Series (WCWS):** Top U.S. college championship.
- **ISF World Championship:** Held every four years.
- **National Pro Fastpitch (NPF):** Premier U.S. professional league.

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## Tennis

Tennis is a dynamic and strategic sport, blending physical endurance with mental agility, where India has a growing tennis legacy, with stars like Leander Paes, Mahesh Bhupathi, Sania Mirza, Rohan Bopanna, and Sumit Nagal putting the country on the global map through multiple Grand Slam doubles titles, Olympic medals, and strong performances in the Davis Cup. Tennis is a racket sport played by two players (singles) or four (doubles) on a rectangular court divided by a net. The objective is to hit a felt-covered rubber ball over the net into the opponent's court, ensuring it bounces once (or is volleyed) and the opponent cannot return it legally. Players use strung rackets to deliver shots like groundstrokes, volleys, and overheads. Lawn tennis is traditionally played on grass courts, but modern variations include clay and hard surfaces for diverse play styles.

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**Four major Grand Slam Tennis Tournaments**

| Tournament | Location | Surface | Held In |
|---|---|---|---|
| Australian Open | Melbourne, Australia | Hard (Plexicushion) | January |
| French Open | Paris, France | Clay (Red Clay) | May–June |
| Wimbledon | London, UK | Grass | June–July |
| US Open | New York, USA | Hard (Decoturf) | Aug–Sept |

UNIT

6

# Yoga for Holistic Health and Personal Excellence

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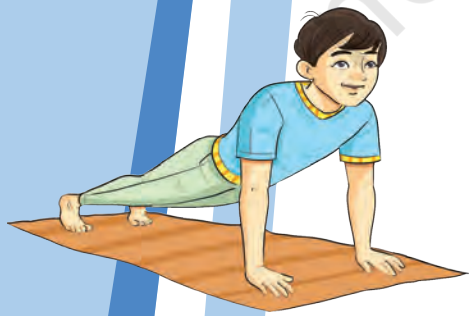
*Yoga is a continuous journey of awareness and self-development. By the end of Grade 8, we explored the values of Yama and Niyama, learned to move our body gently through Sūkṣhma-vyāyāma, understood the importance of practising Sūrya-namaskāra regularly, and became familiar with Āsanas that keep the body steady and comfortable. We also developed breath awareness through prāṇāyāma, learned to guide our senses wisely with Pratyāhāra, and discovered how to focus the mind through Dhāraṇā and Dhyāna. With this strong and balanced foundation, we are now ready to deepen our yogic journey and understand these practices with greater clarity. In Grade 9, we will build on everything we have learned so far, deepening our understanding and practice.*

*The uniqueness of Unit 6 lies in its simple and practical approach to the three main themes,* ***Samagra Svāsthya (Yoga for Holistic Health), Yogamaya Jīvana (Lifestyle for Holistic Health)*** and ***Yoga for Personal Excellence****.*

***Samagra Svāsthya*** *introduces the definition of health, meaning of holistic health, the states of ease and disease, as well as the various dimensions of health.*

***Yogamaya Jīvana*** *highlights different lifestyle factors such as āhāra (food), nidrā (sleep), brahmacharya (moderation), good company, behaviour, circadian rhythm, and habit formation. It offers simple tools to help students manage the challenges of adolescence. The chapter also shows how yoga improves focus, emotional balance, confidence, and menstrual health.*

***Yoga for Personal Excellence*** *guides students to choose the path of Śhreyas (long-term excellence) over Preyas (temporary pleasure). Through the inspiring stories of contemporary role models, students learn that true success is achieved by connecting hard work to a 'higher goal' beyond oneself. Finally, it provides a practical Yoga toolkit, including breathwork and self-reflection, to help students transform their scattered energy into a focused force for personal and national growth.*



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Chapter 21

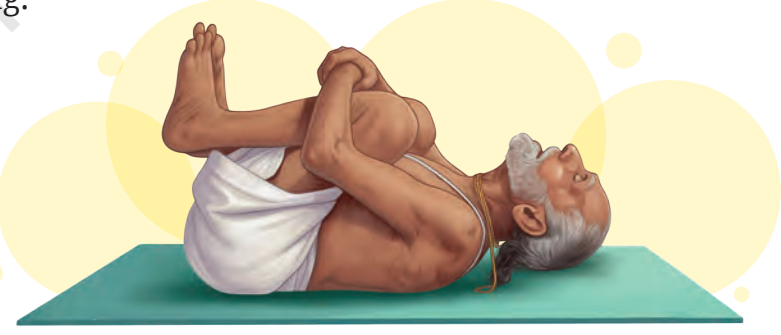
# Samagra Svāsthya
## (Yoga for Holistic Health)

### Swami Sivananda Baba

Swami Sivananda Baba was a real-life superhero of health and happiness. Born in 1897, he lived an extraordinary 128 years, thanks to his simple lifestyle, daily yoga practice, and peaceful mind. In 2022, he was honoured with 'Padma Shri' award for inspiring millions with his healthy habits. His life teaches us that true strength comes from simplicity, discipline, and kindness.

Let us follow Sivananda Baba's example and aim to live a healthy, long, and purposeful life. The Vedas offer us the blessing *"Jīvema śharadaḥ śhatam" (Śhukla-Yajur-Veda* 36.24), which translates to "May we live for a hundred years". The *Upaniṣhads* also encourage us to remain active, engaged, and dedicated so that we not only live a long life but one filled with happiness. A life worth living is one that is driven by purpose, filled with joy, and brings happiness, and fulfillment to those around us.

To truly achieve this vision of a long, purposeful, and joyful life, we must first understand how to live a healthy life '*Śharīram ādyam khalu dharma-sādhanam*' (Our body is the first and primary means to achieve all great things in life). It is important to understand what health really means, and how it shapes our journey toward well-being.



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## Definition of Health

Many people equate being healthy as simply a state of 'not being sick'. However, consider a student who never falls ill but consistently feels lonely and stressed. Are they really healthy? The answer is 'no'. According to the World Health Organisation (WHO), health is defined as, "**a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity**". In other words, health is a condition where there is proper balance and harmony among all the dimensions, not just the absence of diseases.

Being healthy is having the energy to play and study, a calm mind to think clearly, and the happiness of being connected with others. Therefore, health is more than just 'not being sick', it is about living a balanced life where the body, mind, and social bonds all work together in harmony.

Health can be interpreted in the dimensions given below.

| Dimensions | What it covers |
|---|---|
| Physical | Eating nutritious food, getting regulated sleep, regular exercise, good hygiene and self-care, proper functioning of all body systems, good strength, stamina and flexibility. |
| Mental (includes Emotional and Intellectual) | Staying calm, confident and resilient, being able to cope with life's stresses and challenges, showing empathy and understanding others, being able to regulate emotions like joy, fear, anger and sadness and being free from attachment and aversion. |
| Social | Building good relationships with family and friends, working together cooperating, sharing, caring and communicating, being responsible in the community, and living with a positive attitude, truthfulness, nonviolence, selflessness, and contentment. |

The modern definition of health, as described by organisations like WHO, offers a valuable baseline. However, the *Bhāratīya* system established thousands of years ago takes us a significant step deeper into the concept of holistic well-being, the *Svāsthya* (Health). It offers a holistic vision that goes beyond the purely materialistic views of health.

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The holistic vision is defined in the ancient *Āyurvedic* text, the *Suśhruta-saṁhitā* as follows:

समदोषः समाग्निश्च समधातुमलक्रियः ।
प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यभिधीयते ॥

*– सुश्रुतसंहिता, सूत्रस्थानम् 15.41*

***Sama-doṣhaḥ samāgniśh cha sama-dhātu-mala-kriyaḥ ।***
***Prasannātmendriya-manāḥ svastha ityabhidhīyate ॥***

***– Suśhruta-Saṁhitā, Sūtra-sthānam 15.41)***

This verse explains Svāsthya (health) as a state in which all body functions work properly, digestion is efficient, nutrients are well absorbed to maintain energy, body tissues are well nourished, wastes such as urine, stool, and sweat are eliminated regularly, and the self, senses, and mind remain calm and peaceful.

*Āyurveda*, therefore, views health as a harmonious integration of not only physical, mental and social but also the spiritual dimension. Yogic practices help in bringing the synergy and harmonies development of all aspects of human existence.

## Ease and 'Dis-Ease'

Let us understand the state of *Svāsthya* from the yogic point of view. The term *Svāstha (health)* signifies being rooted in one's own natural state of balance, a state of ease and harmony. '*Sva*' means self and '*stha*' means being established. It is the natural state of the body to remain in balance. Though the body constantly strives to maintain an equilibrium, our lifestyle, habits, and stressful experiences can disturb this state, leading to *Vyādhi* (disease).

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## Ease vs. Dis-Ease

### Ease: Natural State of Balance

- Consistent Daily Activities
- Healthy and Strong
- Good Sleep and Appetite
- Calm Emotions
- Focused Mind
- Compassionate and Friendly

### Dis-Ease: Disturbance and Lack of Ease

- Tiredness and Illness
- Poor Sleep and Appetite
- Weak Immune System
- Emotional Instability
- Lack of Focus
- Faded Confidence and Low Optimism

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## Activity

### Your Ease Meter

**Objective:** To identify your current state of being and determine actions for returning to the state of Ease.

**Instructions:** Rate your current state (right now, as you read this) for each level, on a scale of 1 to 5.

- High Dis-ease (Disturbed, blocked, zero comfort, imbalanced) – 1
- Noticeable discomfort; low balance and energy – 2
- Average state; manageable but not fully comfortable – 3
- Comfortable and calm; good balance and energy – 4
- High Ease (Balanced, relaxed, active and energetic) – 5

| | Description | Your Score (1–5) |
|---|---|---|
| 1. | How does your body feel? (Do you feel any aches in your body, low energy levels, trouble in posture, or any tension?) | |
| 2. | How is your Energy Level? (Are you enthusiastic or drained/sluggish?) | |
| 3. | How is your mental focus? (Are your thoughts clear or confused/worried?) | |
| 4. | How stable are you? (Are you calm or easily irritated/moody?) | |

**Keep track of your score for 15 days. Circle the lowest scores and try to find the possible reasons behind both low and high scores.**

Reflection Questions for the Activity:

| | |
|---|---|
| 1. When do you feel that you are in a state of Dis-ease? | • I am usually tired after gaming late at night.<br>• I get upset when I compare myself to others. |
| 2. When do you feel at ease? | • After I attend a yoga class.<br>• When I am laughing with my friends<br>• When I finish my homework early. |
| 3. What can you do to stay at ease? | • Play a sport<br>• Eat healthy food<br>• Stretch every hour<br>• Sleep before 11 PM<br>• Talk to a friend when stressed<br>• Reduce screen time |

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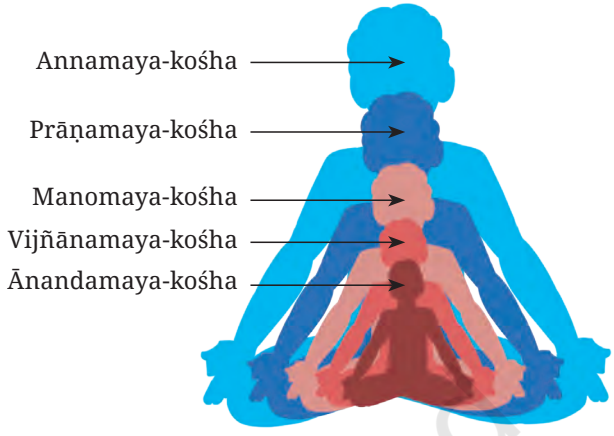
## Dimensions of Holistic Health

From the previous discussion, we understand that health is not just limited to the physical body. It is multidimensional in nature. It is also clear that health is not merely the absence of disease but the experience of complete well-being. Holistic health is an inclusive approach that views the human being as a whole, emphasising the interconnectedness and balance of physical, vital, mental, intellectual, social, and spiritual dimensions.




In Indian philosophy, as explained in the *Taittirīya-Upaniṣhad*, different dimensions of our existence are described through the *Pañchakośha* — the five sheaths that offer a holistic view of well-being. Health is seen as the harmonious existence integration of the *Annamaya* (physical), *Prāṇamaya* (life energy), *Manomaya* (mental), *Vijñānamaya* (intellectual), and *Ānandamaya* (blissful) sheaths.

The correlation of the health and status of the kośha can be understood from the following table:

| *Kośha* | Definition | Balanced state | Imbalanced state |
|---|---|---|---|
| *Annamaya-kośha* (Physical sheath) | *Anna* means 'food' and *maya* means 'composed of'. *Annamaya-kośha* is the physical body made from the food that we eat. It includes bones, muscles, organs, and tissues, and serves as the vehicle for all the other layers. | Healthy, energetic, strong, and active body. | Frequent illness, lifestyle diseases (diabetes, hypertension), tiredness, obesity, etc. |

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| | | | |
|---|---|---|---|
| *Prāṇamaya-kośha* (Life energy sheath) | *Prāṇamaya-kośha* is the sheath of *prāṇa* (life force/ energy) that flows through the body. There are five *prāṇas*, classified according to their functions and broadly related to the major systems of the body. *Prāṇa* governs respiration, *Apāna* governs excretion, *Samāna* governs digestion, *Udāna* governs circulation, and *Vyāna* governs the nervous system. | Steady breath, good stamina, and energetic body. | Low energy, shallow or irregular breathing, fatigue, anxiety, mood swings, poor circulation or digestion, chronic pain, lack of clarity, and poor concentration. |
| *Manomaya-kośha* (Mind sheath) | *Manomaya-kośha* is the sheath of thoughts and emotions. It connects our outer experiences with our inner self, shaping how we feel, think, and react. It governs emotions like desire, greediness, attachment, ego, jealousy, sadness, anger, and fear, and influences our habits and decisions. | Positive emotions, good relationships, and an ability to handle stress | Overthinking, worry, mood swings, irritability, anxiety, lack of focus, negative thoughts, fear, and disturbed sleep. |
| *Vijñānamaya-kośha* (Intellectual sheath) | *Vijñānamaya-kośha* is the sheath of wisdom and intellect. It helps us process experiences, make decisions, distinguish right from wrong, and develop self-awareness. It acts as a bridge between the mind and inner bliss | Good decision-making, ethical values, and clarity of thought | Poor decision-making, confusion, resistance to new ideas, and inability to reflect on one's thoughts and actions |
| *Ānandamaya-kośha* (Bliss sheath) | *Ānandamaya-kośha* is the subtlest layer of our being, a state of inner peace, harmony, bliss | Inner peace, contentment, and joy without external cause | Restlessness, emptiness, addictions, and a lack of satisfaction even after achievements |

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**DID YOU KNOW?**

Among these five kośha, the physical body, *Annamaya-kośha* is *Sthūla-śharīra*, which means that it can be seen through the eyes and is tangible. Whereas *Prāṇamaya-kośha*, *Manomaya-kośha*, *Vijñānamaya-kośha* are *Sūkṣhma-śharīra* (subtle layers) and *Ānandamaya-kośha* is *Kāraṇa-śharira*, the causal body.

**Activity**

Draw five concentric circles, labelling each *kośha* and write one habit that strengthens each sheath.

## Exploring the *Pañchakośha*

| Day | Kośha Focused | Theme | Activities |
|---|---|---|---|
| 1 | *Annamaya-kośha* | Caring for the Body | Begin with 15 minutes of yoga practice, including *āsanas* and *Sūrya-namaskāra*. Observe and record how your body feels before and after the practice. Emphasis is also placed on adopting a *sāttvika* diet, along with adequate rest and sleep. |
| 2 | *Prāṇamaya-kośha* | Breath and Vitality | Practice 5 minutes of deep breathing or *prāṇāyāma* (such as *Nāḍī-śhodhana* or *Bhastrikā*) adopting specific *hasta-mudrās*. Note any changes in alertness and energy levels. |
| 3 | *Manomaya-kośha* | Emotions and Thoughts | Guided Journaling: Write about a strong emotion that you experienced during the day and reflect on how it influenced your focus and behaviour. This will be followed by a group discussion. Practices such as *Trāṭaka* and *mantra* chanting are performed. |
| 4 | *Vijñānamaya-kośha* | Intellect and Values | Case Study Discussion: An ethical situation (for example, choosing between studying and helping a friend) is given to you. Discuss possible responses and identify the most appropriate choice. |
| 5 | *Ānandamaya-kośha* | Inner Joy and Peace | Engage in 5 minutes of silent sitting, followed by a gratitude practice, where you write down one thing you are thankful for. Spending time in nature is encouraged to nurture inner peace and joy. |

***Note for the teacher***

For more details, refer to Grade 7 *Khel Yatra* NCERT Book.

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## Check Your Progress

### Answer the following

1. Am I healthy in all dimensions?
   Tick what you are following on a daily basis:

   **(a) Physical Dimension**
   Do I eat healthy food regularly?
   Do I get enough sleep (7–8 hours)?
   How often do I play, exercise, or do yoga *āsana*, *prāṇāyāma*, *dhyāna*?
   Do I feel energetic throughout the day, or tired quickly?

   **(b) Mind and Emotions**
   Do I learn with focus and what do you mean by learning with positive thinking?
   Am I able to manage emotions like anger, sadness, and stress without getting too disturbed?
   Do I treat everyone with compassion and friendliness?

   **(c) Intellect and Social**
   Do I make thoughtful decisions?
   Do I listen and cooperate with friends/family?
   Do I respect differences in opinions?

   **(d) Spiritual**
   Does contentment make me feel peaceful and happy inside?
   Do I practice silence, meditation, or prayer?
2. When do I feel connected to something bigger than myself?
3. Which kośha do you take care of the most in daily life? Which one needs more attention?
4. What small steps can I start today to move towards "holistic health"?

Health is having all these — a disease-free body; a quiver-free breath; a stress-free mind; an inhibition-free intellect; an obsession-free memory; an ego that includes all, and a soul that is free from sorrow.

*— Gurudev Sri Sri Ravi Shankar*

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Chapter 22

# Yogamaya Jīvana
## (Lifestyle for Holistic Health)

*Achieving holistic well-being is not an overnight process, but it develops gradually through simple, consistent daily habits. Caring for the body and mind is a lifelong journey — a steady, continuous practice that helps us stay healthy and balanced.*

*The life of V. Nanammal popularly known as Amma, a 'Padma Shri' award-winning yoga practitioner from Tamil Nadu, exemplifies this concept beautifully. From a very young age, she practiced yoga diligently and due to this regular and sincere routine, she remained strong, flexible, and mentally calm even in her nineties. Her lifestyle shows us that when simple habits, such as practicing yoga (āsana, prāṇāyāma, and dhyāna), eating moderately, and following a disciplined daily routine are practised consistently, they support the body, mind, and emotions throughout life. Amma's example reminds us that true well-being is cultivated through small actions repeated every day.*

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*In the previous chapter, we learned that health includes not just the body but also our thoughts, emotions, and overall balance. The next step is to understand how our daily choices shape our well-being. A healthy lifestyle becomes a strong foundation for this balance, especially during adolescence, when the body and mind are changing rapidly.*

*Adolescence (10–19 years) is a dynamic and important stage of life — a time of fast growth, changing emotions, and new responsibilities. It is also full of curiosity and creativity, as we begin to discover who we are becoming. The habits we build during this stage shape the adults we will grow into. Yoga can be a strong and steady support during this time, helping maintain physical strength, emotional balance, and mental clarity.*

*In today's world, we often think of lifestyle in terms of convenience, fast food, lots of screen time, and quick shortcuts. But living a meaningful lifestyle is really about small habits that help us stay healthy and balanced. In this chapter, we will look at a few simple factors that shape our well-being, such as:*

- ***Āhāra*** — what and how we eat
- ***Nidrā*** — the quality of our sleep
- ***Brahmacharya*** — how wisely we use our time and channelise our energy
- ***Satsaṅga*** (Good Company)— having friends who inculcate *Sadguna* (good habits) ultimately leading to character building.
- ***Sadvyavahāra*** (Positive Behaviour) — our actions and responses in daily life
- ***Jaivika-ghaṭī*** (Circadian Rhythm) — the body's natural day–night cycle
- ***Saṁskāra-nirmāṇa*** (Habit Formation) — the routines we follow every day

Understanding these factors helps us build a lifestyle that supports good health in body, mind, and emotions.

## ĀHĀRA (FOOD)

Food is not just something we eat to satisfy our hunger or for taste, it becomes part of our body and influences how we think, feel, and act. As you have learnt in science, every cell in our body is formed from the food we consume. In yogic tradition, food is therefore considered an important factor in shaping both physical health and mental clarity. The *Bhagavad-Gītā* (Chapter 17) classifies food into three broad types — *Sāttvika, Rājasika,* and *Tāmasika*.

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***Sāttvika** food* includes fresh fruits, vegetables, grains, nuts, milk, and ghee. These are light, nourishing, and best when eaten fresh. They help keep the mind calm, improve concentration, and support overall health and balance. *Sāttvika* food purifies the body and mind, and supports longevity. This category primarily includes foods that are freshly prepared, juicy, and natural.

***Rājasika*** food includes items that are spicy, sour, very hot, salty, or stimulating, such as strong spices, fried snacks, tea, coffee, and fast food. When eaten in moderation, these can provide energy and strength, which may be beneficial for growing children and adolescents. However, excessive intake can lead to restlessness, impatience, irritation, or reduced focus. *Rājasika* food stimulates both the body and the mind.

***Tāmasika*** food includes stale, reheated, heavily processed, or leftover foods, along with the items that have been stored for a long time. Such foods tend to make the body feel heavy and the mind dull, reducing alertness, enthusiasm, and clarity.

For students, a balanced diet mainly includes *sāttvika* foods, with *rājasika* food in moderation for activity and growth, while avoiding excessive *tāmasika* foods. Making mindful food choices helps maintain energy, focus, and a healthy lifestyle.

As the famous proverb states, '*Yathā annaṁ tathā manaḥ*' which means 'As is the food, so is the mind'. This highlights the close connection between what we eat and how we think and feel.

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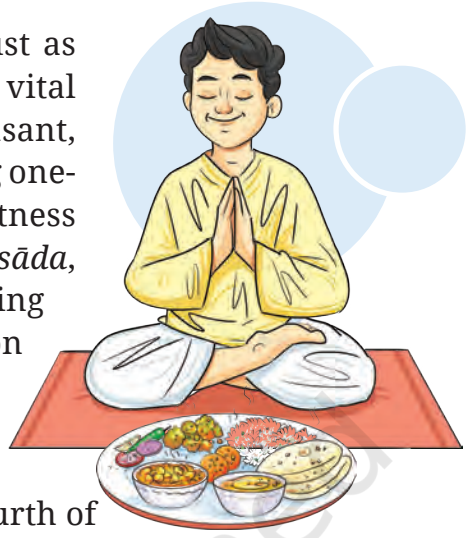
## Mitāhāra: Moderate Eating



Yoga reminds us that how we eat matters just as much as what we eat. Eating in moderation is a vital discipline in yoga. *Mitāhāra* emphasises pleasant, nourishing food taken with reverence, leaving one-fourth of the stomach empty to maintain lightness and balance. When food is received as *prasāda*, accompanied by chanting and a mental offering to the Divine, it becomes a source of purification rather than indulgence. As the *Haṭha-Yoga-Pradīpikā* (1.58) states, "*Mitāhāra*, moderate eating, is conducive to yoga. It consists of pleasant and nourishing food, leaving one-fourth of the stomach empty, eaten as an offering to *Śhiva*."

Awareness is the gateway to transforming our relationship with food. Eating slowly and without distractions, allows us to truly taste and enjoy each bite, while also noticing the moment we feel comfortably full. In contrast, packaged and processed foods are deliberately designed to trigger cravings, often disturbing our energy, mood, sleep, and focus. By cultivating mindful eating, observing hunger signals, eating with calm attention, and noticing how food affects our body and mind we protect ourselves from unhealthy addictions and naturally move towards choices that nourish us.

**A weekend trip to your local market to discover seasonal and local foods**

On a weekend, visit a local market with your family to explore the food native to your region. Observe the fresh seasonal fruits, vegetables, grains, and traditional snacks available there. Find out which fruits and vegetables are in season and note how they help the body stay healthy during the current weather (for example, cooling foods in summer or warming foods in winter).

If possible, talk to a farmer or vendor to learn when these foods are harvested and how they are grown. Also, ask them if they use any regional or traditional recipes using seasonal ingredients, to prepare the food.

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After your visit, complete the following task:

- List 3–4 seasonal fruits or vegetables you found and write one health benefit for each of them.

## Activity

### Choosing Foods That Support Your Body Systems

Our body works best when we eat foods that support each of its systems. This chart is a simple way to understand what kinds of food help different parts of the body stay healthy. You can also fill in examples of local and seasonal foods that are easily found in your region. Eating fresh, home-cooked meals made from seasonal and local ingredients help the body stay active, energetic, and clear-headed throughout the day.

| Body Functions | Food that help us stay healthy | Local/Seasonal options |
|---|---|---|
| Healthy digestion | Warm, freshly cooked meals; such as soups, rice, dal, mildly spiced food, etc. | |
| Healthy breathing and optimal function | Fresh fruits, steamed vegetables, tulsi, ginger, warm water, etc. | |
| Body's resistance to illness | *Amla*, turmeric milk, leafy greens, and seasonal vegetables | |
| Healthy blood circulation | Whole grains, sprouts, lentils, and fibre-rich foods | |
| Muscle growth and strength | Dal, paneer, lentils, peanuts, and millets | |
| Strong bones and flexible joints | Ragi, sesame seeds, leafy greens, and sunlight exposure | |
| Memory and learning ability | Nuts, seeds, ghee, warm milk, Almonds, walnuts, fruits, and whole-grain porridge | |
| Sustained energy and stamina | Banana, jaggery, buttermilk, and traditional snacks (*poha/upmā*) | |
| Healthy Skin and Hair growth | Coconut, ghee, vegetables, and adequate water | |

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## Activity

### Healthy Plate Check

| Body Functions | What to Do | Your Response |
|---|---|---|
| 1. Before Eating | Ask yourself: Am I truly hungry? | |
| 2. During Eating | • Take small bites<br>• Chew slowly<br>• Avoid distractions (watching TV/mobile) | How did you feel? |
| 3. After Eating | Feel your body and mood | Did you feel light/ heavy? |
| 4. Reflect | Did you stop eating when you felt comfortable enough? | |
| 5. Healthy Choice | Write one small change you will try this week. | |

## News You Can Use — Eat Like a Yogī

"*Sāttvika* eating makes one a *yogī*, but overeating can make a person a *rogī* (unwell)." This idea connects beautifully with the saying: "Eat your water and drink your food." It simply means chewing your food so well that it becomes almost liquid, and sipping water slowly instead of gulping it down. Proper chewing helps digestion begin in the mouth, reduces strain on the stomach, and allows the body to absorb nutrients better. These small habits—eating calmly, chewing thoroughly, and drinking water gently—help keep the body light, the mind relaxed, and overall health in balance.

- Thirst is the body's natural signal for indicating that it needs water, so pay attention to it. Drink when you feel thirsty and avoid drinking large amounts of water when your body doesn't ask for it.

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### DID YOU KNOW?

A Japanese scientist, Masaru Emoto, conducted experiments with water as it froze and observed that words and emotions appeared to influence the formation of water crystals. He reported that water exposed to positive words formed more pleasant crystal patterns, while water exposed to negative words formed distorted ones. This suggests that emotions may influence not only our mind and behaviour but also how our body responds to the food we eat and the water we drink, reminding us to eat and drink with a calm and positive attitude.

Love | Thank you | I hate you

- Lukewarm water in the morning can support digestion and cleanse the system.
- Very cold water, when taken too often, may weaken digestion.
- Hydration does not come from water alone—fruits, vegetables, soups, coconut water, and herbal drinks also keep your body hydrated.
- Be mindful while drinking—notice how your body feels before and after drinking water.
- Sit and drink water slowly, gently sipping it instead of gulping it down.
- Staying well-hydrated can improve concentration in class, stamina during sports, and overall mood.
- Avoid storing or drinking water from plastic bottles.

## NIDRĀ (SLEEP)

Sleep is like the body's natural recharge mechanism, just as a phone needs charging to work well. During sleep, the body repairs tissues, restores energy, balances hormones, clears toxins, and strengthens

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immunity. The mind also benefits, as sleep improves memory, focus, mood, and emotional balance.

According to the *Patañjali's Yoga-sūtra*, deep sleep is a state in which the mind experiences the awareness of 'nothing', giving it complete rest. Modern science also emphasises that teenagers need quality sleep for healthy functioning, yet many miss this due to late-night screen use and irregular routines. Good sleep keeps us fresh, active, and positive, making it one of the simplest and most powerful ways to care for both the body and mind.

Just as the food we eat influences our mind and the sleep we get helps us recharge, the way we use our energy during the day also shapes our overall well-being. This is where *brahmacharya* becomes meaningful. While *āhāra* nourishes the body and *nidrā* refreshes the mind, *brahmacharya* teaches us to use our time and energy wisely so we can stay focused, balanced, and healthy in our everyday life.

## Activity

### Sleep and energy check

1. For the next two weeks, try this simple night routine.

   **Yogic Practices:** Practice 5 minutes of deep breathing and *prāṇāyāma* before sleep.

   Avoid using screens (mobile / TV) for at least 1 hour before bed.

   Avoid heavy meals at night and eat in moderation.
2. Each morning, reflect and write down the following:

   The quality of your sleep (deep / disturbed / dreams)

   Your energy level (fresh / tired / alert)
3. At the end of the week, think of the day when you slept less than usual.
   - Did you find it harder to focus in class the next day?
   - How was your mood throughout the next day?
   - Did you notice any cravings for junk food or sugary snacks?

Write a few lines about what you experienced and whether the night-time routine made any difference to your sleep and energy. Share and discuss your answers with your classmates. Does the amount of sleep we get affect our focus, feelings, and food cravings?

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## BRAHMACHARYA

*Brahmacharya* is one of the *Yamas* in yoga and refers to the wise use of your time and energy. Adolescence is traditionally known as *Brahmacharyāśhrama*, a stage of life meant for learning, building discipline, and developing good values. Practising brahmacharya will help you manage your senses, reduce unnecessary distractions, and stay focused on what truly matters in life.

In everyday life, this simply means noticing where your time and energy are utilised. Sometimes we may spend too much time on social media, gaming, eating junk food, etc. These habits drain our energy. A small step toward brahmacharya is to observe our routines honestly and bring moderation into one area at a time. Even small changes can make a big difference.

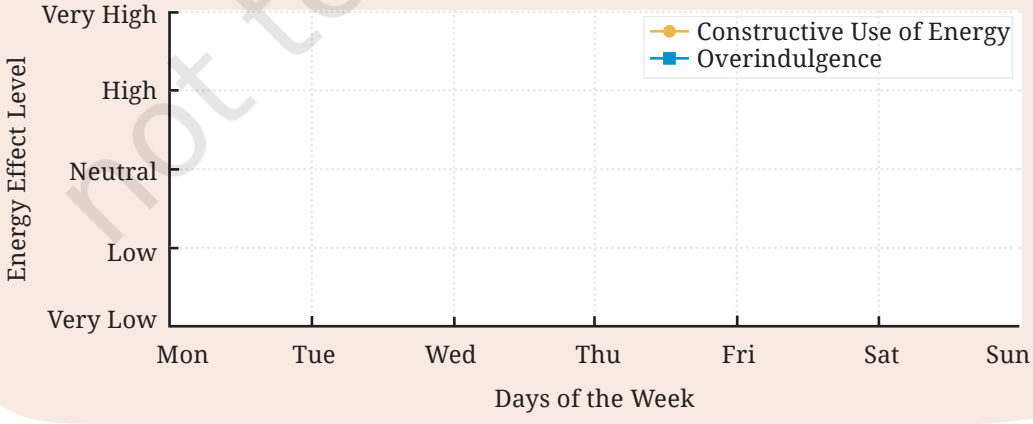
Brahmacharya is not about strict rules, it is about balance. It teaches us to direct our energy towards things that help us learn, grow, and become the best version of ourselves. It is the control over the temptations of your mind that can deviate us from your aim. It is the preservation and direction of our energy and time towards righteousness.

Our social and emotional well-being connects naturally with brahmacharya. When we use our time and energy wisely, it becomes easier to handle emotions, avoid distractions, and build positive relationships with the people around us.

### Weekly Energy Awareness Check (7-Day Reflection Chart)

**Activity**

**Weekly Energy Awarness Graph Tracker**

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Student Checklist – My energy level today is:

| Energy Level | Tick ✓ the statements that match how you feel |
|---|---|
| Very High Energy | ☐ I feel very active and fresh.<br>☐ I am excited to do my work or play.<br>☐ My mind feels sharp and focused.<br>☐ I have a positive, enthusiastic mood. |
| High Energy | ☐ I feel alert and ready for tasks.<br>☐ I can concentrate well.<br>☐ I feel motivated to complete my work. |
| Neutral Energy | ☐ I feel okay—not tired, not energetic.<br>☐ I can do routine tasks without difficulty.<br>☐ My mind feels normal, neither fast nor slow. |
| Low Energy | ☐ I feel tired or sleepy.<br>☐ It is hard to focus for longer periods.<br>☐ I feel lazy or slow in starting tasks. |
| Very Low Energy | ☐ I feel drained or exhausted.<br>☐ I want to rest or lie down.<br>☐ Even simple work feels difficult. |

Use the checklist to note your energy levels each day for one week. As you observe, think not only about how much energy you have, but also how you use it. Continue this activity for the next two weeks and notice whether your energy is being directed towards meaningful goals like studies, sports, or creative work, or is it getting scattered in distractions such as indulging in excessive screen time or junk food. This activity helps you understand *brahmacharya* as the wise use of energy.

## LET US REFLECT

After completing the previous chart, answer the following questions.

1. Which activities gave you the most positive energy this week?
2. Which habits made you feel tired, low, or restless?
3. What is one healthy change that you practised that you want to continue next week as well?

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## Swami Shivananda and the Practice of *Brahmacharya*

Swami Shivananda, a respected spiritual teacher from Tamil Nadu, began his life as a doctor. Even when he had access to comfort and luxury, he chose to live simply. Later, he moved to Rishikesh to dedicate his life to yoga, meditation, and service. Swami Shivananda practised moderation in his diet by eating simple, freshly prepared meals and only as much as the body needed. He believed that overeating made the mind dull and restless. He also followed moderation in thought—training his mind through prayer and meditation to stay calm and positive. His moderation in actions was evident in his balanced daily routine of study, yoga practice, writing, service, and rest. Because of this disciplined lifestyle, Swami Shivananda remained mentally sharp and energetic. He went on to write more than 200 books on yoga and spiritual living and inspired people across the world. He emphasised that *brahmacharya* is not only for monks, and students too can practise it by avoiding distractions and using their time wisely. His life shows us that small habits of balance and self-discipline help us stay focused, use our energy well, and achieve meaningful goals.

### LET US REFLECT

What is one distraction you could avoid to better concentrate on your goals?

### DID YOU KNOW?

Even though Yoga and Buddhism come from different Indian traditions, both guide us towards a balanced and meaningful life. They emphasise right conduct (सम्यक् शील) and right concentration (सम्यक् समाधि) as essential practices to develop the right understanding or wisdom (सम्यक् प्रज्ञा). Together, these values help shape our thoughts, actions, and behaviour, leading us towards self-discipline, inner clarity, and a more harmonious life.

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## Satsaṅga (Good Company)

The people we spend time with play an important role in shaping our thoughts, habits, and the way we use our energy. This good company is referred to as *Satsaṅga*, or good company. Being around positive, disciplined, and supportive people makes it easier to practise *brahmacharya*. Great yogis like Swami Sivananda and Swami Vivekananda, through their lives, set an example that good company helps us stay focused, channel our energy towards meaningful work, and grow steadily without feeling pressurised. Their experiences remind us that choosing the right company is a quiet but powerful step towards personal growth and balance.

### A Short Story from Swami Vivekananda's Life

As a young student, Narendranath (later known as Swami Vivekananda) was curious, energetic, and deeply interested in learning. Instead of spending his time in unhealthy distractions, he chose the company of scholars, monks, and seekers of knowledge. He dedicated long hours to discussions, reading, and reflection, which helped sharpen his thinking and discipline his mind.

Later, when he met Sri Ramakrishna, Vivekananda spent time in his company regularly. This *Satsaṅga* deeply influenced his thoughts, behaviour, and way of life. Under this guidance, he learned self-control, focus, and compassion. This strong foundation later helped him speak confidently at the World Parliament of Religions and inspire millions. Swami Vivekananda's life shows that choosing the right company helps us channel our energy wisely, practise *brahmacharya* naturally, and move steadily toward meaningful goals.

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## Activity

**Value of association**

| Question | Your Reflection |
|---|---|
| How do you feel after spending time with your friends/classmates? | |
| Has anyone inspired you to adopt a good habit? What habit was it? | |
| Is there a habit you picked up from peers that you want to change? | |

## Activity

**Track how much time you spend on studying, phone, play, and sleep.**

| Day | Study time | Play time | Sleep time | Screen time | Others | How I feel |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
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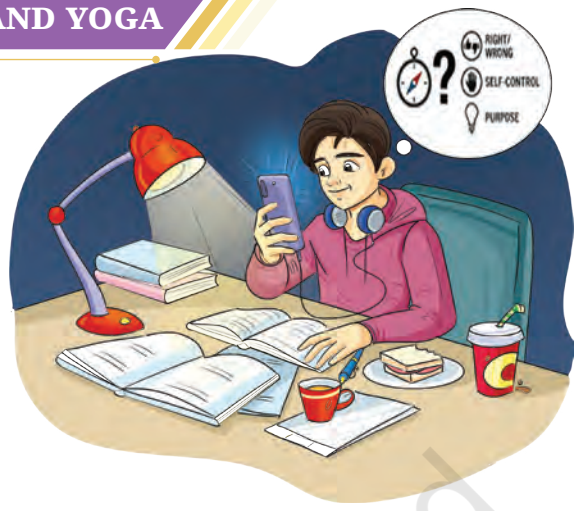
## Challenges of Adolescence and yoga




Yoga is more than just physical exercise, it acts like a compass that helps us find balance in the body, clarity in the mind, and harmony in our emotions. By following simple habits such as staying active, practising yoga through *āsanas, prāṇāyāma,* and *dhyāna,* eating wisely, thinking positively, and building healthy relationships with family, friends, and society, we can support our overall well-being. During adolescence, these practices transform confusion into confidence and struggle into strength, leading us towards a healthier, happier, and more meaningful future.

Here is a tool to understand the specific challenges that are faced by adolescents.

### Challenges during adolescence and how yoga practices help

| Type of Challenge | Common Issues Faced by Students | Helpful Yogic Practices | How These Practices Help |
|---|---|---|---|
| Physical and Health Challenges | Weak posture, stiffness, tiredness, poor digestion and hormonal changes | *Āsanas (Tāḍāsana, Vṛikṣāsana, Paśhchimottānāsana), Sūkṣhma Vyāyāma, Āhāra (balanced diet), Nidrā (proper sleep)* | Yoga practices help improve strength, flexibility, posture, digestion, and overall physical health |
| Emotional and Mental Challenges | Stress, anxiety, mood swings, exam pressure, and lack of focus | *Prāṇāyāma (Anuloma-Viloma, Bhrāmarī), Dhyāna, Śhavāsana, Yoga-nidrā* | It helps to calm the mind, reduce anxiety, improve concentration, and balance emotions |
| Social and Behavioural Challenges | Peer pressure, anger, impatience, and communication issues | *Vihāra* (balanced routine), group yoga practice, *Sevā* (helping others), mindful behaviour | It also helps to build patience, empathy, cooperation, and healthy relationships |

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| | | | |
|---|---|---|---|
| Moral and Value-Based Challenges | Confusion about right and wrong, lack of discipline, and impulsive actions | *Yama* (*Ahiṁsā, Satya*), *Niyama* (*Śhaucha, Santoṣha*), self-reflection | It helps develop self-control, honesty, responsibility, and inner discipline |
| Overall Life Balance | Feeling overwhelmed, low confidence, and lack of direction | Regular yoga practice (15–20 minutes daily) | Yoga helps in building confidence, emotional stability, clarity, and a balanced lifestyle |

## Activity

### Expression scale for managing adolescent challenges

Read each statement carefully. Be honest with yourself and tick the option that best matches how you usually feel or act. The following table will help you understand your emotions and habits so you can manage them.

## Anger Management

| Statements | Always | Often | Sometimes | Rarely | Never |
|---|---|---|---|---|---|
| I lose my temper quickly when things do not go my way. | | | | | |
| I argue, shout, or fight when I feel angry or upset. | | | | | |
| I find it hard to calm down once I get angry. | | | | | |
| I try to relax by taking deep breaths or staying quiet when I'm angry. (positive check) | | | | | |

## Emotional Balance and Stress

| Statements | Always | Often | Sometimes | Rarely | Never |
|---|---|---|---|---|---|
| I feel stressed or pressured because of exams, expectations, or studies. | | | | | |
| I find it difficult to relax, even during play or free time. | | | | | |

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| | | | | | |
|---|---|---|---|---|---|
| I often feel sad, worried, or withdrawn when things go wrong. | | | | | |
| I practice yoga, breathing, or meditation to calm my mind. (*positive check*) | | | | | |

## Peer Pressure and Substance Use

| Statements | Always | Often | Sometimes | Rarely | Never |
|---|---|---|---|---|---|
| I have been tempted or pressurised by friends to try harmful substances. | | | | | |
| I feel that it is difficult to say 'no' to peer pressure. | | | | | |
| I know that smoking, alcohol, or drugs can harm my health. | | | | | |
| I choose to stay away from harmful substances. (*positive check*) | | | | | |
| I choose to stay with friends who follow healthy habits. | | | | | |

### LET US REFLECT

1. What situations cause you to feel the most anger or stress?
2. What helps you calm down — talking, breathing, physical activity or something else?
3. Who can you talk to when you feel overwhelmed?

### Activity

1. Discuss in your class, the common problems faced during adolescence and their possible solutions.
2. Maintain a diary to note down your emotions, stress levels, and how yoga helped regulate them.
3. Enact situations showing peer pressure, stress, or family conflict and present healthy ways to resolve them.

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## Menstrual Health and Yoga

Menstruation is a natural process. Sometimes, due to stress or lifestyle imbalance — that leads to hormonal imbalance — girls may experience painful periods (dysmenorrhoea) or irregular cycles. Yoga provides a safe and effective way to balance hormones and ease menstrual discomfort.

### Yoga Routine for Hormonal Balance and Well-being

| Practices | What to Practise | How It Helps |
|---|---|---|
| Loosening Practices | Neck movement (*Grīvā-sañchālana*) and shoulder rotation (*Skandha-chakra*), hip loosening, toe and ankle rotations, gentle bending and twisting, *Pavana-muktāsana-kriyā*, *Titalī-āsana*, and *Chakkī-chālanāsana*. | Loosening practices prepares the body, improve circulation, reduce stiffness, and ease discomfort. |
| *Āsana* | Beginners group: *Vajrāsana, Supta-vajrāsana, Uṣhṭrāsana, Mārjarī-āsana, Śhaśhāṅkāsana, Baddha-koṇāsana,*, and *Bālāsana*.<br>Intermediate group: *Tāḍāsana, Kaṭi-chakrāsana,, Sūrya-namaskāra, Setu-bandhāsana,, Ardha-śhalabhāsana, Vakrāsana, Jānu-śhīrṣhāsana, Supta-baddha-koṇāsana, Utkaṭāsana, and Naukāsana.*<br>Advanced group: *Bhujaṅgāsana, Śhalabhāsana, Dhanurāsana, Paśhchimottānāsana, Ardha-matsyendrāsana, Sarvāṅgāsana, and Halāsana.* | *Āsana* helps to tone the reproductive system, improve blood flow, balance hormones, reduce cramps, and support overall health. |
| *Ṣaṭkarma* | *Jala-netī* | *Jala-netī* helps maintain hormonal balance by reducing stress, improving nasal breathing, and supporting better functioning of the nervous and endocrine systems. |
| *Prāṇāyāma* | *Nāḍī-śhodhana, Bhrāmarī, Śhītalī/ Śhītatkārī, Ujjāyī,* and *Bhastrikā.* | *Prāṇāyāma* calms the nervous system, reduces stress, and supports hormonal balance. |

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| | | |
|---|---|---|
| Relaxation | *Śhavāsana* with breath-awareness, and *Yoga-nidrā.* | Relaxation helps in relieving stress, stabilising mood, and improves emotional balance. |
| *Dhyāna* (Meditation) | *Om chanting* with *Chin-mudrā, Antar mauna* and **Ajapā japa.* | *Dhyāna* improves mental calmness, focus, and emotional stability. |
| Balanced Diet | Fresh, home-cooked, seasonal food with proper nutrients. | |

*The steps for the practice are given at the end of the chapter

## Activity

### Track Your Yogic Lifestyle (Weekly Self-Check)

At the end of each week, rate yourself on a scale of 5–1, where 5 = 'Very Good', 4 = 'Good', 3 = 'Average', 2 = 'Needs Improvement', and 1 = 'Needs a Lot of Improvement'.

| Area | Sentences to reflect on | Week 1 | Week 2 | Week 3 | Week 4 |
|---|---|---|---|---|---|
| Physical Health | I usually choose healthy, home-cooked food | | | | |
| | I get enough sleep and wake up fresh | | | | |
| | I practise yoga or physical activity daily | | | | |
| Emotional Well-being | I stay calm most of the day | | | | |
| | I express my feelings instead of holding them in | | | | |
| Social Behaviour | I use mobile phones and gadgets wisely | | | | |
| | I spend time with positive and supportive people | | | | |
| | I am able to concentrate better in class and studies | | | | |
| For girls Only | I take care of my body and rest well during menstruation | | | | |

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## Circadian Rhythm and Habit Formation

Our body has its own internal 24-hour clock that guides when we sleep, wake up, feel hungry, stay active, and even how our mind works. This natural cycle is called the circadian rhythm. Everyone's rhythm is slightly different and changes with age, but its purpose is the same — to keep the body working smoothly.

The circadian rhythm influences many functions, such as sleep, body temperature, immunity, hormones, digestion, memory, and how we react to stress. When this rhythm is disturbed, we may face problems like poor sleep, tiredness, mood swings, digestion issues, or difficulty in focusing.

Building habits becomes easier when we follow this natural rhythm. Some simple ways to align with it include:

- Sleeping and waking up at the same time every day
- Studying or working when the mind feels most alert
- Exercising during high-energy periods
- Eating meals at regular times

When we live in tune with our circadian rhythm, our body and mind function at their best. Ayurveda also teaches us that aligning our daily routine with nature's cycle—sunrise, sunset, and seasonal changes—supports digestion, immunity, and overall balance.

In conclusion, yoga is a holistic practice that address wellness in a comprehensive way. It comprises cleansing methods, physical postures, breathing techniques, and meditation practices ensuring well-being in all dimensions. It is a preventive, transformative tool

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making you happy, healthy and wise. Make sure that you take small actions daily for your overall improvement and then yoga will become a part of your lifestyle.

## Activity

This activity will help you understand your natural energy pattern and see how sleep and screen time influence your mood and alertness. By observing these daily habits, you become more aware of your circadian rhythm and how it affects your body and mind. This awareness supports the practice of *Brahmacharya*, as it encourages the wise use of time and energy, and helps in forming healthy habits. Over time, it supports better daily planning, balance, and a more disciplined lifestyle. For the next two weeks, fill in this chart to observe your body rhythm.

| Day | Wake-up Time | Bed Time | Screen Use Before Sleep (Yes/No and Duration) | Time I Felt Most Active | Time I Felt Tired or Low | Mood on Waking Up |
|---|---|---|---|---|---|---|
| Day 1 | | | | | | |
| Day 2 | | | | | | |
| Day 3 | | | | | | |
| Day 4 | | | | | | |
| Day 5 | | | | | | |
| Day 6 | | | | | | |
| Day 7 | | | | | | |

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## Open Discussion Themes

- Adolescence
- Hormonal changes

***Notes for the teacher***

- *Encourage students to practise an everyday yoga routine with awareness, without forcing their bodies. Remind them that consistency matters more than perfection. Consistent, even brief practice enhances strength, flexibility, and emotional balance.*
- *Motivate students to choose traditional, local, and seasonal foods. Encourage children to avoid processed, packaged and unhealthy food. If possible, suggest visiting local markets where they can interact with farmers and learn more about where their food comes from.*
- *Help students understand that lifestyle changes do not have to be big. Even small, steady improvements can make a meaningful difference. Encourage them to stay patient and not feel discouraged if progress seems slow.*
- *Support girls by helping them understand how yoga can be helpful during menstruation, especially gentle stretches, breathing practices, and relaxation techniques.*

- Menstrual health awareness
- Role of food, sleep, exercise, yoga, and positive thinking in hormonal balance.
- Changes noticed after 4 weeks of Yoga practice.

## Check Your Progress

**Section A**

### Answer in one sentence

1. What is *Mitāhāra*?
2. Name the three types of foods described in the *Bhagavad-Gītā*.
3. What is the body's natural 24-hour cycle called?
4. What does *brahmacharya* mean in daily life?
5. Write one benefit of regular sleep.

**Section B**

### Answer in 2–3 sentences

1. How does sleep affect your mood and concentration?
2. Why is it important to choose *sāttvika* food more often?
3. What changes can you make to reduce distractions in your daily routine?
4. How does practising yoga help during adolescence?
5. Why is good company important for a healthy lifestyle?

**Section C**

### Answer in 3–4 sentences

1. Look at your weekly habits. Identify one overindulgence (for example, screen time, junk food, gossip) and explain how you can bring moderation to it.
2. Explain how the circadian rhythm can guide healthy habits in sleep, study, and eating.

***Note for the teacher***

The *step-by-step procedures for Ajapā japa* and *Antar mauna are explained below.*

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## AJAPĀ JAPA

*Japa* is the continuous repetition of a mantra which comes from the mouth and *Ajapa* comes from the breath and the heart. *Japa* is the preliminary practice of mantra repetition and ajapa is the perfection of this practice. It relaxes the body and mind.

**Stage 1** (*Preparation*): Sit in a comfortable meditatative *Āsana* with your back upright and head straight. Place your hands on your knees in the *jñāna* or *chin-mudrā.* Become aware of your body and the meditation posture. Feel the position of your body from the top of the head to the toes. Feel your posture becoming steady and still. Develop total awareness of your body and maintain this stillness.

**Stage 2** (*Breath Awareness*): Switch the awareness from your body to your breath. Practice slow and deep breathing. Breathe in, counting to five, and then breathe out, counting to five again. Concentrate on the breath in your throat and feel it moving through your throat. Gradually feel the stillness of your mind and body as a whole. Notice your breath moving from your navel to your throat. Focus your attention on your navel. Inhale slowly in a straight line from your navel up to your throat. Then exhale slowly in a straight line from your throat down to your navel. Count to five while breathing in and while breathing out. Continue until your breath moves along this fixed path without conscious effort. Watch your breath carefully, without missing a single breath.

**Stage 3** (*Frontal Passage Visualisation*): Visualise the psychic passage between your navel and your throat as a long, thin, and transparent tube. It is hollow inside and open at both ends, like a flute. Move your awareness up and down along the outside surface. Now, visualise the tube from within. Move your attention across the passage up and down, and to the centre.

**Stage 4** (*Breath Rotation Inside the Psychic Passage*): Feel your breath moving inside the frontal passage, between your navel and your throat. While inhaling, the breath ascends from your navel to your throat. While exhaling, it descends from your throat to your navel. Feel as your awareness moves up and down the centre of the psychic passage, along with your breath.

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**Stage 5** (*Rotation of Prāṇa*): Gradually become aware of the *prāṇa* (vital energy) moving together with your breath and consciousness. *Prāṇa* moves in form of energy with the breath. This flow of *prāṇa* or energy between the navel and the throat creates the psychic passage. Visualise the thin sparkling stream of energy flowing inside from inside your navel to your throat as you breathe in and from your throat to your navel as you breathe out. With practice you will spontaneously feel a powerful current of energy flowing up and down the psychic passage.

**Stage 6** (*Rotation of So'ham*): Leave the awareness of the prāṇa. Carefully listen to the subtle sound of your breath moving up and down the passage. The inherent sound of your breath is Soham. As you breathe in here the sound made is 'so-o-o-o-o'. As you breathe out, hear the sound 'ham-m-m-m-m-m'. Feel the vibration of the mantra moving with the breath.

**Stage 7** (*Ending the Practice*): Get ready to end the practice. Withdraw your awareness from your frontal passage and the mantra. Change over to normal breathing. Become aware of your body and the meditation posture. Feel your body from head to toe. Breathe in deeply and chant 'Om' three times.

## Antar Mauna

*Antar mauna*, translates to inner silence. It cultivates awareness, mental clarity, and mastery over the mind. It follows the principle of *Sākṣhī-bhāva* (the attitude of witnessing). It is a profound method of inner observation and transformation. By fostering conscious awareness of mental processes, it leads to inner silence that is natural, stable, and transformative, supporting holistic well-being and spiritual growth. It guides the practitioner away from external distractions towards their inner consciousness. Learning this practice correctly leads to mental stability, depth of meditation, and self-realisation.

### Step 1 (Preparation)

Sit in a comfortable meditation posture. Keep your back upright and head straight. Close your eyes and become aware of the whole body.

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Keep observing different sounds in the surroundings, nearby and far away, without analysing any particular sound. Shift your awareness to your natural, spontaneous breathing. Maintain full awareness of your breath for a while.

### Step 2 (Awareness of Thoughts)

Now observe the thoughts that arise in your mind. Do not stop or change them. Focus your full attention on your thought process. Become aware of every thought, like clouds passing in the sky.

### Step 3 (Creation and Dissolution of Thoughts)

Select any one thought and maintain this thought for some time. Hold it for a few moments and then leave it. Then, create another thought and leave it. Hold each one for a few minutes and dismiss it. Take your awareness to *Chidākaśha* (space in front of the closed eyes), and be a witness to any thoughts or visions that arise. Do this for some time.

### Step 4 (Experience of Thoughtlessness)

Now focus on the space between thoughts. Do not put any effort. Simply experience the silence. This state comes spontaneously, not by force. Continue doing this for some time.

### Step 5 (Conclusion)

Gradually bring your awareness back to your breath. Become aware of your body. Rub your palms together and place them over your eyes. Open your eyes.

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Chapter 23

# Yoga for Personal Excellence

*In the previous chapters, we learned how yoga helps us build a strong, balanced body and mind. Now, let's see how yoga can help you do your best in life, whether in your studies, sports, arts, as a leader, or by simply becoming your best self. This chapter will help you learn how to handle challenges wisely and excel in everything you do.*

*Personal excellence is a continuous, conscious choice to develop one's capabilities, character, and skills to achieve the highest potential in all aspects of life. It is not a final destination or about achieving perfection, but rather a journey of ongoing self-improvement, growth, and commitment to one's potential.*

## Yoga, the Art of Making Wise Choice

Imagine a scenario. It is 10:00 PM, and you have a mathematics exam tomorrow. You know you should study (goal). But your phone rings, your friends are online playing a game, and a new viral video has just come out on social media (distraction). You are confused. One path feels good now, but might hurt you later. The other path feels difficult now, but brings success later.

You might think this is a modern problem caused by smartphones, but thousands of years ago, teenagers faced similar dilemmas. Although the objects of distraction varied, the human mind remained the same. The ancient Yogis identified that at every moment, life offers you two 'boarding passes' to your future:

1. ***Preyas* (The Pleasant):** This is the path of immediate pleasure. It is easy, comfortable, and instantly satisfies your senses. For example, eating junk food, procrastinating, doom-scrolling, etc. *Preyas* looks like a friend today but acts like an enemy tomorrow.

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2. ***Śhreyas* (The Good):** This is the path of long-term well-being. It often requires effort (*sādhanā*) and discipline initially, but it leads to strength, excellence, and lasting happiness. For example, exercising daily, communicating honestly, studying sincerely, etc. *Śhreyas* may look like a strict teacher today but is your best friend in the long run.

## Achieving Excellence through Yoga

We often think of excellence as saying "yes" to hard work. But actually, excellence starts with the power of saying "no" to distractions.

Let's travel back thousands of years to meet a teenager named Nachiketāḥ, the boy who said "no" to the easy path.

Nachiketāḥ was a young boy, perhaps your age, who found himself face-to-face with Yama (the Lord of Death). Yama was so impressed by the boy's courage and discipline that he offered him three boons (wishes). For the final wish, Nachiketāḥ asked for the ultimate knowledge, "What is the secret of life and death? What is the highest truth?" Yama hesitated. He knew this knowledge required immense focus and maturity. So, he tried to distract the boy. He tested him.

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"Do not ask me for that," Yama said. "Instead, take these gifts:

- I will make you the king of the world.
- I will give you piles of gold and wealth.
- I will give you fast chariots (like modern sports cars) and music.
- I will give you a long life to enjoy all of this.

But do not ask me for the ultimate knowledge!"

Imagine that! He was offered everything a teenager could dream of—fame, money, gadgets, etc.

## The Choice of Excellence

Nachiketāḥ looked at all those distractions and smiled. He said,

"These things are temporary and won't stay with me forever. These will vanish soon! I would like to have that which stays with me forever, that which is eternal."

Yama was stunned. He had never met anyone—adult or child—who could resist these temptations. He felt Nachiketāḥ was a true Yogi and taught him the secrets of excellence in life and immortality.

Excellence is not an accident, it is a habit formed by your choices. When you consistently choose ***Śhreyas***, you build the four pillars of a successful life, i.e., *abhaya, satya, kartavya* and *ānanda*.

**Four Pillars of Personal Excellence**

| ***ABHAYA*** (Fearlessness) | ***SATYA*** (Truthfulness) | ***KARTAVYA*** (Duty / Responsibility) | ***ĀNANDA*** (Bliss / Inner Joy) |
|---|---|---|---|
| | | | |
| Courage, Confidence, Challenges | Honesty, Integrity, Authenatity | Diligence, Discipline, Contribution | Inner Peace, Happiness, Futtiliment |

Just as Nachiketāḥ stood up to Yama, you build courage *(abhaya)* every time you say "no" to peer pressure. It is the strength to choose the hard right over the easy wrong. Truth *(satya)* requires integrity.

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Just as you must be honest about your limits in a yoga pose to avoid injury, choosing *Śhreyas* teaches you to be honest with yourself and others.

Success comes from doing what needs to be done i.e. doing one's duty *(Kartavya)*, not just what you feel like doing. It is the discipline to prioritise responsibilities (like study and service) over temporary distractions.

While *Preyas* offers fleeting excitement, *Śhreyas* leads to bliss (*ānanda*, or lasting inner joy). You realise that true happiness does not come from external objects but from the peace of a disciplined and focused mind.

Now, imagine if you had chosen *Śhreyas*. How would the result have been different?

### LET US REFLECT

- Think about a time recently when you chose Preyas (immediate pleasure) over *Śhreyas* (long-term good).
- The Situation: (for example, I watched a movie instead of preparing for an annual day performance.)
- The Immediate Feeling: (for example, I felt relaxed and calm.)
- The Result: (for example, I felt stressed the next morning and my presentation was average.)

Choosing *Śhreyas* (the good) over *Preyas* (the pleasurable) requires focus on your higher life goals and a calm mind. Yoga provides the mental stability and discipline to anchor this focus, helping you make the right, long-term beneficial decision even when facing a critical situation.

### Activity

How do we practise *Śhreyas*? Every time you step on your yoga mat, sit at your study desk or start your performance in sports or arts, you are practicing this choice of *Śhreyas* and *Preyas*.

When you hold a plank pose even when your muscles shake, you are choosing strength (*Śhreyas*) over the comfort of collapsing (*Preyas*).

When you choose to focus on your creative project instead of watching TV, you are choosing growth (*Śhreyas*) over stagnation (*Preyas*).

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Yoga teaches us that we are not just biological machines, but we have a vast potential to excel in the material life and grow to into divinity. But to unlock that potential, we must stop being slaves to our impulses, rein in our senses and decide with a calm and focused mind.

## Preparing the Body and Mind for *Śhreyas* through Yoga Practice

One of the main obstacles that pulls us repeatedly towards *Preyas* instead of *Śhreyas* is laziness and a lack of routine. When the body is not active and there are too many thoughts in the mind, it becomes difficult to make wise choices, even when we know what is right.

Yoga teaches us that self-mastery begins with the body. By gently training the body through regular āsana practice, and calming the mind through *prāṇāyāma*, we develop alertness, discipline, and inner motivation. This daily effort (*sādhana*) gradually reduces laziness, increases energy levels, and strengthens willpower. As regularity grows, choosing *Śhreyas* becomes natural rather than forced.

If you are at a point where you are having to choose between instant gratification and long-term happiness, take a step back. Sit in any meditative posture — *Sukhāsana*, *Vajrāsana* or *Padmāsana* — and practice slow, deep breaths, bringing all your focus to your abdominal breathing till the mind settles down. You will then be in a clear, calm state of mind to make a wise decision.

### Activity

Practice this simple 10-minute yoga routine, spending one minute on each practice:

1. *Tāḍāsana*
2. *Vīrabhadrāsana*
3. *Vṛikṣhāsana*
4. *Paśhchimottānāsana*
5. *Śhaśhāṅkāsana*
6. *Nāḍī-śuddhi Prāṇāyāma*
7. *Bhrāmarī Prāṇāyāma*
8. Sectional breathing
9. *Trāṭaka-kriyā*
10. *Śhavāsana*

Practice these regularly and reflect on the changes you observe:

1. Do you notice any changes in your thought pattern?
2. Do you feel more focused, and has this helped you make better decisions?
3. Are your distractions reduced or become easier to manage?

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## Focusing on Higher Goals

Think of an Indian Olympian who is one of India's youngest shooting champions. She has often spoken about the mental discipline required to excel at the highest level of sport. In the high-pressure environment of Olympic-level competition, maintaining composure is as crucial as technical skill. For her, the *Bhagavad-Gītā* has become an essential tool for maintaining mental calmness and resilience. When asked about the last few moments of the 10m air pistol final, she said, "Honestly, I read a lot of *Gītā*, so what was going through my mind is 'just do what you are meant to do, do what you are supposed to do' and leave whatever. Destiny you can't control." So, in the *Bhagavad-Gītā*, Kṛiṣhṇa says to Arjuna: "You focus on the *Karma*, and not on the outcome. That was running in my head."

Her daily routine involves 6–7 hours of shooting practice and an hour of yoga practice. She even solves puzzles during breaks to keep her mind sharp and clear.

Can you name who she is?

Here's a secret about overcoming distractions that many students miss!

Distractions are more tempting when your goal is small and your mind is not focused or calm.

### Higher Goals vs Smaller Goals

*"Nālpe sukham asti, bhūmaiva sukham."* (*Chhāndogya-Upaniṣhad*)

**Meaning:** "There is no joy in the small/limited. True joy is only in the infinite/vast."

Do you know about the teacher who refused to be miserable?

In ancient India, the great teacher Chāṇakya went to the court of King Dhanānanda to warn him about a Greek invasion.

Instead of listening, the arrogant King insulted Chāṇakya. He mocked his appearance, pulled him by his hair, and threw him out of the palace.

Now imagine this moment, a respected teacher has been humiliated in front of hundreds of people.

The Small Goal Reaction: If Chāṇakya's goal was just "I want respect" or "I want a job in the palace," this moment would have

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destroyed him. He would have gone home, cried, and lived in misery forever. He would have been broken by shame.

The Big Goal Response: But Chāṇakya had a higher goal. His vision was to save Bharat from Greek invasion and our people from slavery.

Because his goal was big, the personal insult didn't break him. It fueled him. He untied his hair and vowed, "I will not tie my hair until I replace this corrupt King with a leader who can protect the nation."

He didn't go home to cry. He went to the streets, found a boy named Chandragupta, trained him, and built the Mauryan Empire. Chāṇakya showed us that when your eyes are fixed on a mountain peak, you do not care if you trip on a stone.

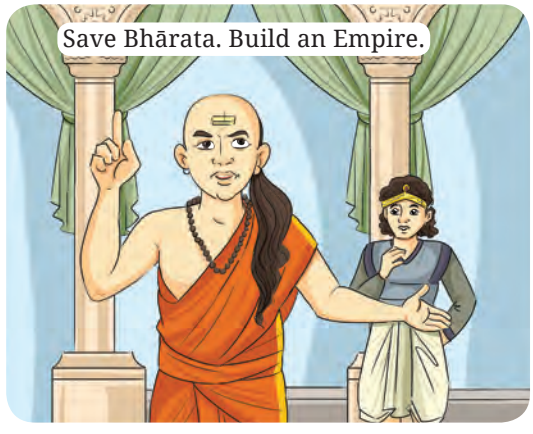
Shifting focus from a smaller goal to a higher goal creates a psychological shield that we can apply to our own modern lives. When you are in a fragile state because of a small goal— like wanting to be popular in school — the results are often devastating. One rude comment from a friend makes you sad for a week because you have nothing else to look forward to. Conversely, when you enter an unbreakable state driven by a big goal, such as wanting to become a scientist to solve climate change, the result changes entirely. If someone makes fun of your glasses or your grades, it does not matter; you are too busy building the future, and the insult simply bounces of you.

The same logic applies to our daily habits and how we sustain our motivation over time.

A narrow or smaller goal might be to be fit to look good, which makes it very easy to quit when things get tough. However, a higher goal means you want to be fit so you have the strength to help others and serve your country, a mindset that makes it almost impossible to quit.

**Smaller Goal**

**Higher Goal**

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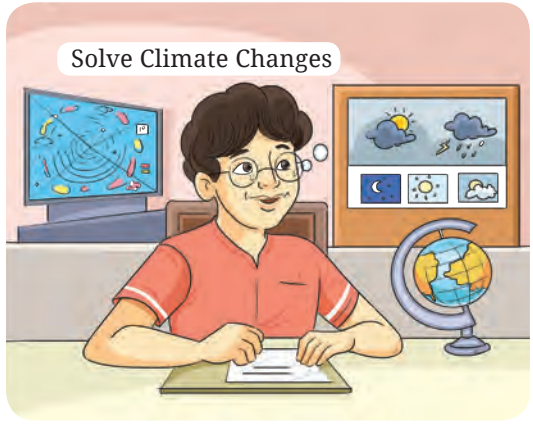


Let your goal be so big that challenges make you shine brighter!

When you link your hard work to something bigger than yourself, like your family, your community, or your country, you find extra energy within yourself.

Yoga is not only about self-improvement, it is about preparing yourself for higher/bigger goals in life. You train your body and mind not just to develop yourself and stand out but to be helpful to others. Thinking beyond self helps you avoid internal distractions.

आत्मनो मोक्षार्थं जगद्धिताय च ऋग्वेद ।

*Ātmano mokṣhārthaṁ jagad-dhitāya cha ।*

*– Ramakrishna Mission*

For one's own salvation, and for the good of the world.

## Why is Excellence Hard?

You might be thinking, "I know I should study. I know I should practise. Why is it so hard to actually do it?" You know that studying helps you learn, and junk food is not great for your health. Yet, we often struggle to do the 'right' things.

What stops you from always doing good and excelling in what you do?

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A few reasons could be:

- Lack of awareness and concentration
- Low Confidence
- Small goals and perspective (Thinking only about "Me, Me, Me", or being selfish)
- Distractions (Social media, gaming, or peer pressure)

## Why is Excellence Hard?

Distractions and low concentration

Low confidence and small goals

Lack of Awareness

The solution: Higher purpose

बुद्धियुक्तो जहातीह उभे सुकृतदुष्कृते ।
तस्माद्योगाय युज्यस्व योगः कर्मसु कौशलम् ॥

*– भगवद्गीता 2.50*

*Buddhi-yukto jahātīha ubhe sukṛita-duṣhkṛitel ।*
*Tasmād yogāya yujyasva yogaḥ karmasu kauśhalam ॥*

*– Bhagvad-Gītā, 2.50*

Therefore, strive for yoga—yoga is skill in action.

This means doing every action—whether you are studying, playing, or helping a friend—with full dedication. Your actions affect the world around you.

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How do we learn to achieve this 'skill in action'? We need to look at the lives of people who lived for others.

- Dr APJ Abdul Kalam didn't just want to be a great scientist; he wanted to make India strong and self-reliant. Dr. Kalam was the architect of India's missile programme and the 11th President of India. But he didn't work for fame, money, or power. He owned very little—just his books, his *vīṇā*, and a few clothes. His entire life was a *yajña* (sacrifice) for the nation. Dr. Kalam believed that his 'Higher Goal' was to ignite the minds of the youth. Even after being President, he didn't retire to a life of luxury. He travelled constantly to meet students in schools and colleges. He personally to thousands of emails from children. He mastered the art of "*Karma-Yoga*," executing complex scientific missions with clinical precision while remaining completely detached from the rewards. When the first SLV-3 launch failed in 1979, he courageously took the blame as the mission director. Yet when the mission succeeded a year later, he stepped aside to let his team take the limelight. This rare ability to absorb failure and distribute credit transformed a group of individuals into a world-class scientific force. He passed away doing exactly what he loved most, teaching students. Until his last breath, he was serving others.His excellence was a gift to his country.

Excelling is not just about winning a prize. You are also setting an example for your younger siblings, classmates, and your community. You show them what can be achieved. Excellence is a mindset, not a physical condition.

You might be thinking, "These role models are superheroes. I am just a normal teenager. How can I be like them?"

The secret is this — excellence is not a gift, but a process. Just as coal turns into a diamond under pressure, a human mind turns into a genius through *sādhanā* — Yoga-*sādhanā*. These role models consciously or unconsciously applied yogic principles to enhance their minds. Here is how Yogic practices can help you excel:

## 1. Turning a Lightbulb into a Laser (*Ekāgratā*)

**Normal Mind:** Your energy is like a lightbulb, scattered in all directions (thinking about food, friends, games, movies, homework, etc).

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**Yogic Mind:** Yoga practices like *Trāṭaka* (gazing) and *Prāṇāyāma* (breathwork) gather all your scattered energy into a single beam.

**The Result:** You become like a laser, with a focused mind, and you can then solve even the hardest math problem or master a sport.

### 2. Stopping the Energy Leaks (*Prāṇa*)

**Normal Mind:** We leak energy every day through anger, jealousy, overthinking, and scrolling. Mornings are refreshing, but by evening, we are exhausted.

**Yogic Mind:** Yoga stops these leaks. It teaches you to stay calm *(Samatvam)*, not react disruptively to situations in life, but act positively.

**The Result:** You are energetic throughout the day to pursue your dreams.

### 3. From Fragile to Strong (*Tapas*)

**Normal Mind:** When things get hard, we break and quit.

**Yogic Mind:** Yoga postures pose a challenge to the body. Holding a pose even when your legs shake teaches your brain to be comfortable with discomfort.

> "If I have to go to school again I will learn only two things: Concentration of mind and detachment, so that I can focus and learn any subject at will."
>
> *– Swami Vivekananda*

**The Result:** When life hits you, you do not break, but bounce back stronger

Let us open the Excellence Toolkit to see the practical steps you can take, starting today.

## Your Toolkit: 5 Steps to Excellence

### Step 1: Hard Work and Commitment (*Tapas*)

It is easy to work hard on things you enjoy. It is much harder when the work feels boring but is still important.

**The Trap:** "Why should I study this boring chapter?"

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**The Higher Goal Solution:** You are not just studying a chapter. You are building a discipline of knowledge, that you will need to solve real problems in the future. For example, a surgeon cannot say, "This surgery is boring. I'll quit."

**The Yogic Solution:** In yoga, this is called Tapas, which means hard work, self-discipline and the inner strength to transform. You build up energy in your body to clear away what holds you back. By practising tapas, you prepare yourself to overcome challenges in daily life and help your family or country when needed.

### Action Plan

**Embrace Boredom:** Stick to a task for 15 minutes even if it feels boring, knowing that it is building your mental muscles.

**Finish What You Start:** Do not leave a task half-done.

Need to mention about tapas in daily life: eg: daily exercise, yogic practices, etc.

*Tapas* becomes your fuel for growth when you make it a part of your daily life.

It could be your consistent practice of yoga on a daily basis, being aware of your breath, sticking to healthy eating, waking up in the morning for a run, speaking kindly, or setting boundaries with technology.

Start small, gradually build up your discipline like holding your pose for one extra breath or holding a challenging pose to build strength .

### Step 2: Positivity, Emotional Intelligence, and Resilience

Sometimes, your emotions can feel like a rollercoaster. But if you always react to your feelings, it becomes difficult to focus on your bigger goals.

**The Trap:** Getting lost in 'what others say or think about you' and letting others control your mood.

**The Higher Goal Solution:** When you have an important task, like organising a school event or helping a charity, small insults do not bother you. You are too focused on your bigger purpose to worry about little things.

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**The Yogic Solution:** *Prāṇāyāma* helps you be aware of your emotions and pause before reacting. It keeps you from saying things in anger and helps your group stay peaceful so everyone can do well together.

### Action Plan

**The 3-Breath Rule:** Before reacting to anger, take 3 deep breaths.

**Empathy:** Ask, "How can I support my friend right now?" instead of judging them.

### Daily Practices that Support Emotional Control

- ***Nāḍī-śhodhana Prāṇāyāma***: 9 rounds
- ***Bhrāmarī Prāṇāyāma***: 5 times
- **Slow, Deep Breathing**: 20 times
- **Short Periods of *Dhyāna***: 5 minutes

### Step 3: Leadership and Responsibility (Sevā)

Leadership is not about being the boss. It is about *sevā*, which means service.

**The Trap:** "I won't volunteer because it's too much work" or "What if others laugh at me?"

**The Yogic Solution:** *Karma-Yoga* is about selfless action. It teaches you to work for the satisfaction of self and not reward. Do things because you feel they are right, like taking care of your surroundings. If the classroom is messy, a leader cleans it, not for praise, but because it is the right thing to do. When you focus on helping others, you stop worrying about what people think. People follow a person who is genuine, works selflessly and cares for others. They are true leaders.

### Action Plan

**Take Initiative:** Do not wait to be asked. If you see clutter, pick it up.

**Help others shine:** Teach a concept you know to a friend who is struggling with it.

**Step Out:** Volunteer for community service or school responsibilities.

### Step 4: Self-Confidence (The *Prāṇa* Connection)

As a student, it is easy to lose confidence because of social media or comparing yourself to others.

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**The Trap:** "I am not good enough because I do not look like that influencer."

**The Higher Goal Solution:** Confidence is not about how you look but about how useful you are. When you know you are helping your family, friends or community, you feel engaged and important. You stop worrying about your appearance and focus on what you can do for others.

**The Yogic Solution:** Yoga builds *Prāṇa*, or energy. When you stand tall in a yoga pose, you are not just stretching, you are also learning to stand strong against peer pressure.

### Action Plan

**Practice *Āsanas*:** *Vīrabhadrāsana* (Warrior Pose): This helps you build the strength and courage of a warrior who stands up for what is right.

***Vṛikṣhāsana* (Tree Pose):** This pose helps you find balance, even when life feels chaotic. *Padmāsana* (Lotus Pose): Use this pose to sit quietly and meditate, thinking about your goals.

***Sevā*:** When you feel low, go help someone. Doing a good deed is the fastest way to boost confidence.

### Step 5: Self-Awareness and Continuous Growth (*Svādhyāya*)

**The Trap:** "I know enough, I do not need to learn more."

**The Higher Goal Solution:** The world faces big problems like climate change, pollution, and poverty. To solve these complex issues, innovation, research and knowledge of numerous subjects is necessary. To be happy and uplift the needy, continuous learning and action is required. You can help the planet with your small actions.

**The Yogic Solution:** *Svādhyāya* means self-study. Think about your actions. Are you becoming someone who helps the world, or just someone who takes from it?

### Action Plan

**Seek Feedback:** Ask, "How can I improve to be a better team player?"

**Daily Reflection:** "Did I help someone today? Did I waste my potential today?"

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**Practical Implementation:** Start Now

Everything depends on your mental and physical health. You cannot help others if you are not strong or if you are unwell.

## Daily Micro-Practices

3 minutes of Sectional breathing to energise.

5 minutes of neck rolls and spinal twists.

5 minutes of *Nāḍī-śhodhana Prāṇāyāma/Bhrāmarī Prāṇāyāma* for focus.

**A brief overview of the integration of yogic practices for Personal Excellence**

| Aspects of excellence | Yogic practices | Inner Quality Developed |
|---|---|---|
| Strong, energetic and healthy body | *Āsanas, Kriyās* and, *Prāṇāyāma* | Vitality, stamina |
| Discipline and self control | Regular practice, lifestyle discipline | *Tapas* – inner strength to transform |
| Focus/concentration | *Dhāraṇā, Dhyāna* | *Ekāgratā, clarity* in thoughts. |
| Values/character | *Yama-Niyama* | Integrity, compassion, responsibility |
| Overall life balance | Feeling overwhelmed, low confidence, lack of direction | Regular yoga practice (15–20 minutes daily) |
| Emotional balance and leadership<br>Managing stress, anger, anxiety | *Dhyāna,* Relaxation, *Karma-Yoga* (selfless service) | Calmness, empathy, confidence, resilience |
| Higher goals | *Svādhyāya,* reflection<br>Purpose from deeper yogic insights and inquiry | Meaningful living, wisdom |

**Activity**

**The Excellence Tracker**

Excellence is not an act, but a habit. Copy this table into your journal and use it to track your journey towards becoming a role model.

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## Part 1: Weekly Checklist

**Check the box only if you have honestly achieved the specific goal that day**

| The Excellence Habit | The Specific goal | Mon. | Tue. | Wed. | Thurs. | Fri. | Sat. | Sun. |
|---|---|---|---|---|---|---|---|---|
| Focus (*Dhāraṇā*) | I defeated a distraction (phone/TV) to finish some important work. | | | | | | | |
| Discipline (*Tapas*) | I completed a task I found boring or difficult without complaining. | | | | | | | |
| Service (*Sevā*) | I did something selfless for my family, friends, or neighborhood (Higher Goal). | | | | | | | |
| Emotional Strength | I took a "*Prāṇa* Pause" (3 deep breaths) instead of reacting in anger/ fear. | | | | | | | |
| Body (*Śharīra*) | I practiced 10 minutes of Yoga or conscious breathing to charge my energy. | | | | | | | |
| Growth (*Svādhyāya*) | I admitted a mistake or asked for feedback to improve myself. | | | | | | | |

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## Part 2: The Sunday Reflection

At the end of the week, answer these three questions to practice self-awareness:

**The Win:** What was one moment this week where I felt truly proud of my behaviour?

**The Challenge:** Which distraction was the hardest to fight this week? How will I handle it better next week?

**The Higher Goal:** How did my actions this week help someone else or contribute to my home or school environment?

## Conclusion: The Ant and the Vulture

Excellence is not a quick race, but a long journey. You might feel small right now. But if you keep moving forward with a clear purpose to improve yourself and help others, you will go farther than you think.

To support this journey towards personal excellence, a unique yoga module has been designed, requiring a few minutes of daily practice. When sincerely and consistently followed, these qualities not only reflect on the yoga mat but also lead to observable improvements in physical vitality, mental clarity, confidence, discipline, and the ability to make calm, wise choices in challenging situations.

### Yoga Module for daily practice

| | |
|---|---|
| Opening Prayer | ॐ सह नाववतु । सह नौ भुनक्तु । सह वीर्यं करवावहै ।<br>तेजस्विनावधीतमस्तु मा विद्विषावहै ॥<br>ॐ शान्तिः शान्तिः शान्तिः ॥<br>*Oṁ* saha *nāvavatu* । Saha nau bhunaktu । Saha *vīryaṁ karavāvahai* ।<br>*Tejasvināv adhītam* astu *mā vidviṣhāvahai* ॥<br>*Oṁ śhāntiḥ śhāntiḥ śhāntiḥ* ॥ |
| Closing Prayer | ॐ सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।<br>सर्वे भद्राणि पश्यन्तु मा कश्चिद् दुःखभाग् भवेत् ॥<br>ॐ शान्तिः शान्तिः शान्तिः ॥<br>*Oṁ* Sarve bhavantu *sukhinaḥ* sarve santu *nirāmayāḥ* ।<br>Sarve *bhadrāṇi paśhyantu mā kaśhchid* duḥkha-*bhāg* bhavet ॥<br>*Oṁ śhāntiḥ śhāntiḥ śhāntiḥ* ॥ |

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| Category | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---|---|---|---|---|---|---|
| Breathing | Hands Stretch breathing: Stage 1: (Horizontal), Stage 2: (Oblique), Stage 3: (Vertical) | Ankle Stretch Breathing, Rabbit breathing, Dog breathing | *Śhaśhāṅka* breathing, *Ananta-śhayana* Breathing, | Forward-backward bending, side bending, bending and twisting | Forward-backward bending, side bending, bending and twisting | Tiger breathing | Eye exercise — Up and down, Left and right, Diagonal movements, rotation |
| Loosening practices | *Bhujabandha-śhakti-vikāsaka* Rotation with the palms on the shoulder. Free rotation of the shoulders. | *Kaphoṇi-śhakti-vikāsaka, Wrist rotation* | *Aṅgulī-śhakti-vikāsaka,* Stretching and compressing of the fingers, Stretching and compressing of the toes, *Jānu-śhakti–vikāsaka* | Full butterfly, hip rotation | *Pavana-muktāsana-kriyā, Gatyātmaka-meru-vakrāsana* | *Sarvāṅga-puṣhṭi, Chakkī-chālanāsana, Bhū-namanāsana.* | Camel walk, Toe walk, crab walk, Heel walk, Frog jump |
| *Sūrya-namaskāra* | 3 round, 12 steps each | 3 rounds | 3 rounds | 3 rounds | 3 rounds | 3 rounds | 3 rounds |
| *Āsana* | *Ardhakaṭi-chakrāsana, Vajrāsana* | *Pāda-hastāsana, Ardha-chakrāsana* | *Trikoṇāsana, Padmāsana* | *Parivṛitta-trikoṇāsana, Vakrāsana* | *Bhujaṅgāsana, Śhalabhāsana* | *Śhaśhāṅkāsana, Uṣhṭrāsana* | *Sārvāṅgāsana, Matsyāsana* |
| Relaxation | *Śhavāsana* | *Śhavāsana* | *Śhavāsana* | *Śhavāsana* | *Śhavāsana* | *Śhavāsana* | *Yoga-nidrā* |
| *Prāṇāyāma* | *Nāḍī-śhodhana Prāṇāyāma* | Sectional Breathing | *Anuloma-Viloma Prāṇāyāma* | *Bhastrikā Prāṇāyāma, Nāḍī-śhodhana Prāṇāyāma* | *Śhītalī Prāṇāyāma, Śhītakārī Prāṇāyāma* | *Bhrāhmarī Prāṇāyāma, Nāḍī-śhodhana Prāṇāyāma* | *Ujjāyī Prāṇāyāma* |
| *Dhyāna* | *Oṁ-Dhyāna* | *Pañchakośha-Dhyāna* | *Jatru-trāṭaka* | *Antar mauna* | *Nādānusandhāna* | *Bindu-trāṭaka* | *AJapā japa* |

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## Check Your Progress

### Section A

### Answer in one sentence

1. What is the difference between *Śhreyas* and *Preyas* regarding the type of happiness they offer?
2. Which quality *(Abhaya)* do you build when you stand up to peer pressure like Nachiketāḥ stood up to Death?
3. According to the text, "Success comes from doing what needs to be done"; what is the Sanskrit term for this "duty"?
4. How does practising *Satya* (Truth) prevent injury during a yoga pose?
5. Name the two athletes mentioned in the text as examples of focusing on "higher goals".

### Section B

### Answer in 2–3 sentences

1. Explain the statement, "Excellence is not an accident; it is a habit formed by your choices."
2. Why does the text suggest that "higher goals" lead to peace, while "smaller goals" can lead to misery?
3. 'Physical limitations cannot stop excellence.' Do you agree? Explain with the help of an example.
4. Why is *ānanda* (bliss) considered different from the "fleeting excitement" offered by Preyas?
5. How does the pillar of *Kartavya* help a student handle the distraction of video games vs. the responsibility of studying?

### Section C

### Answer in 3–4 sentences

1. Identify a recent situation where you had to choose between "the hard right" (*Śhreyas*) and "the easy wrong" (Preyas). How did your choice affect your inner peace or stress levels?
2. Through yogic practices, how can one overcome a personal challenge like fear of failure or physical weakness?

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***Note for the teacher***

*The following are the details of practices covered in Grades 3 to 8 textbooks, which may be referred to while conducting practical sessions.*

| Grade | ***Śhakti-vikāsaka*** **(Strengthening Practices)** | ***Sūkṣhma Vyāyāma*** **(gentle and subtle movements for the joints)** |
|---|---|---|
| 4 | *Aṅgulī, Maṇibandha, Kaphoṇi, Bhuja-bandha-śhakti-vikāsaka* | |
| 5 | *Jaṅghā-śhakti-vikāsaka* | *Pādāṅgulī-namana, Gulpha-namana, Gulpha-chakra, Ardha-titalī-āsana, Śhroṇī-chakra, Gatyātmaka-meru-vakrāsana, Chakkī-chālanāsana, Bhū-namanāsana, Pāda-sañcalanāsana* |
| 6 | *Sūkṣhma Vyāyāma* | Neck Movements— Up and down movement, Left and Right Movements |
| 7 | *Aṅgulī-śhakti-vikāsaka, Maṇibandha-śhakti-vikāsaka maṇibandha-chakra, kehuni-śakti-vikāsaka,* | *Skandha-chakra, Grīvā-sañchālana* |
| 8 | *Pavana-muktāsana* series | *Pādāṅgulī-namana*<br>*Gulpha-namana*<br>*Gulpha-chakra*<br>*Jānu-namana*<br>*Jānu-chakra*<br>*Ardha-titālī*<br>*Pūrṇa-titālī* |

| Grade | ***Śhītalīkaraṇa-vyāyāma*** **(Loosening practices)** | **Breathing Practices** |
|---|---|---|
| 3 | Heel walk, Frog jump | |
| 4 | Camel walk, Toe walk | Hands stretch, Deep breathing |
| 5 | Loosening the Toes, Loosening the Ankle joints, Loosening of Hip joint, Hip rotation | Straw breathing |
| 6 | *Ekapāda-pavanamuktāsana-kriyā* (single leg), *Dvipāda-pavanamuktāsana-kriyā* (both legs) | Rabbit breathing, Dog breathing |

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| | | |
|---|---|---|
| 7 | Forward and backward bending, Side bending, Bending and twisting, Twisting | *Marjāryāsana, Vyāghrāsana* |
| 8 | *Hṛidaya-gati, Ūrdhva-gati, Sarvāṅga-puṣhṭi* | |

| Grade | ***Prāṇāyāma*** | ***Kriyā*** |
|---|---|---|
| 3 | Breathawarness | Eye exercises |
| 4 | *Bhrāmarī, Anuloma-Viloma* | *Karṇa-randhra-dhauti, Kapāla-randhra-dhauti* |
| 5 | *Ujjāyī Prāṇāyāma, Śhitakārī Prāṇāyāma, Śhītalī Prāṇāyāma* | *Bindu-trāṭaka* |
| 6 | Sectional breathing, *Nāḍī-śhuddhi, Bhrāmarī* | Introduction to *Jatru-trāṭaka* |
| 7 | *Bhastrikā* | *Jatru-trāṭaka* |
| 8 | *Sūrya-bhedana Prāṇāyāma, Chandra-bhedana Prāṇāyāma* | Introduction to *Kapālabhāti,* Preparatory practices for *Jyotiḥ-trāṭaka* |

| Grade | ***Āsana*** |
|---|---|
| 3 | *Vṛikṣhāsana, Sukhāsana,Vajrāsana, Bhujaṅgāsana, Pavana-muktāsana* |
| 4 | *Ardha-chakrāsana, Pāda-hastāsana, Trikoṇāsana, Śhaśhāṅkāsana, Uṣhṭrāsana, Vakrāsana, Setu-bandhāsana, Uttāna-pādāsana, Śhalabhāsana, Dhanurāsana, Śhavāsana* |
| 5 | *Hastottānāsana, Utkaṭāsana, Vīra-bhadrāsana, Parivṛitta-trikoṇāsana, Parvatāsana, Jānu-śhīrṣhāsana, Gomukhāsana, Ardha-matsyendrāsana,, Sarpāsana, Tiryag-bhujaṅgāsana, Matsyāsana, Siṁha-garjanāsana* |
| 6 | *Ardha-kaṭi-chakrāsana, Padmāsana, Bhujaṅgāsana, Śhalabhāsanā, Uttana-padāsanā* |
| 7 | *Utkaṭāsana, Vṛikṣhāsana, Gomukhāsana, Sarala-dhanurāsana, Sarvāṅgāsana, Matsyāsana* |
| 8 | *Garuḍāsana, Vīra-bhadrāsana, Paśhchimottānāsana, Supta-vajrāsana, Uṣhṭrāsana, Pavana-muktāsana, Parivṛitta-jānu-śhīrṣhāsana, Utthita-padmāsana* |

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| Grade | *Mudrā* | *Dhyāna* |
|---|---|---|
| 3 | *Chin-mudrā,* | *Om* chanting |
| 4 | *Namaskāra-mudrā, Chin-mudrā, Nāsikā-mudrā* | *Om* chanting |
| 5 | *Prāṇa-mudrā, Apāna-mudrā, Pṛithvī-mudrā* | *Om* chanting |
| 6 | *Chin-mudrā, Chinmaya-mudrā, Ādi-mudrā, Brahma-mudrā, Nāsikā-mudrā* | *Nādanusandhāna* |
| 7 | *Ṣhaṇmukhī-mudrā, Jñāna-mudrā, (Chin-mudrā, Chinmaya-mudrā, Ādi-mudrā, Brahma-mudrā, Nāsikā-mudrā)* | *Pañchakośha* |
| 8 | *Tāḍāgī-mudrā* | Simple meditation |

An implementation plan helps in systematically planning timelines and sessions. An overview of the implementation of Unit 6 is given here, which can be thoughtfully adapted as required. This plan also enables continuous tracking of students' progress and helps in assessing whether the intended objectives and learning outcomes are being effectively achieved.

| **Month 1** | | | | |
|---|---|---|---|---|
| | **3rd period** | **6th period** | **9th period** | **12th period** |
| Yoga for Daily Life (15 mins) | *Samagra Svāsthya* — Story of Swami Sivananda Baba, Definition of Health, *Bhāratīya* concept of *Svasthya* (Holistic Health), Ease and Dis-ease, Dimensions of Holistic Health | The correlation of health and the status of the *kośha*, Exploring the *Pañchakośha* | *Yogamaya Jīvana* - Introduction, The life of Amma, *Āhāra* (food) - *Sāttvika, Rājasika, Tāmasika, Mitāhāra* | *Āhāra* (food) - Activity 1, 2 and 3 discussion, *Nidrā* (sleep) - Reflection Activity discussion |
| *Yoga Sādhana* (25 mins) | Hands Stretch Breathing, Shoulder, hip, wrist, ankle, neck - rotations, _____ | Full Butterfly, Rabbit and Dog breathing, _____ | *Śaśāṅka Breathing, Ananthaśayana Breathing*, Stretching and compressing of the fingers and toes, *Jānu Śakti Vikāsaka*, _____ | Forward-backward bending, side bending, bending and twisting, _____ |

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| | | | | |
|---|---|---|---|---|
| | *Sūrya Namaskāra* (1 round),<br>_____<br>*Ardhakaṭi Cakrāsana, Vajrāsana,*<br>_____<br>*Śavāsana,*<br>_____<br>*Kapālabhāti,*<br><br>*Jatru-trāṭaka* | *Sūrya Namaskāra* (1 round),<br>_____<br>*Pādahastā sana, Ardhacakrāsana,*<br>_____<br>*Śavāsana,*<br>_____<br>Sectional Breathing,<br>_____<br>*Pañchakośha Dhyāna* | *Sūrya Namaskāra* (1 round),<br>_____<br>*Vīrabhadrāsana, Paścimottānāsana*<br>_____<br>*Śavāsana,*<br>_____<br><br>*Nāḍī-śhodhana Prāṇāyāma, Ujjāyī Prāṇāyāma*<br>_____<br><br>*Ajapā japa* | *Sūrya Namaskāra* (1 round),<br>_____<br>*Parivṛta Trikoṇāsana, Vakrāsana,*<br>_____<br>*Śavāsana,*<br>_____<br>*Bhastrikā Prāṇāyāma,*<br><br>*Nāḍī-śhodhana Prāṇāyāma,*<br>_____<br><br>*Nādānusandhāna* |

| **Month 2** | | | | |
|---|---|---|---|---|
| | **15th period** | **18th period** | **21st period** | **24th period** |
| Yoga for Daily Life (15 mins) | *Brahmacharya* - Activity 1, 2 and 3 discussion, | *Satsaṅga* - Activity 1 and 2 discussion | Revision of chapter 1 | Revision of chapter 2 |
| *Yoga Sādhana* (25 mins) | Tiger breathing, *Sarvāṅga-puṣṭi, Cakki Cālanāsana, Bhū Namanāsana.*<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Śaśāṅkāsana, Uṣṭrāsana,*<br>_____<br>*Śavāsana*<br>_____<br>*Bhrahmari Prāṇāyāma, Nāḍī-śhodhana Prāṇāyāma,*<br>_____<br>*Oṁ Dhyāna* | Camel walk, Toe walk, crab walk, Heel walk, Frog jump<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Sārvāṅgāsana, Matsyāsana,*<br>_____<br>*Śavāsana*<br>_____<br>*Nāḍī-śhodhana Prāṇāyāma*<br>_____<br>*Oṁ Dhyāna* | *Ardha Titali Āsana, Pūrṇa Titali Āsana, Śroṇi Cakra, Pāda Sañcalanāsana*<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Vṛkṣāsana, Paścimottānāsana, Vīrabhadrāsana- 1*<br>_____<br>*Śavāsana*<br>_____<br>*Ujjāyī, Śītālī Prāṇāyāma*<br>_____<br>*Antarmauna* | *Gatyātmaka Meru Vakrāsana, Cakki Cālanāsana, Bhū Namanāsana Vakṣasthala-śakti-vikāsaka, Kaṭi-śakti-vikāsaka, Sarvāṅga-puṣṭi*<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Vīrabhadrāsana- 2, Naṭarājāsana, Uttānāsana*<br>_____<br>*Yoga Nidrā* |

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| Month 3 | | | | |
|---|---|---|---|---|
| | 27th period | 30th period | 33rd period | 36th period |
| Yoga for Daily Life (15 mins) | Mid-Term Assessment | Adolescence challenges and yoga,<br>Anger management,<br>Emotional balance and stress,<br>Peer pressure and substance use | Menstrual Health and Yoga | Circadian Rhythm and Habit Formation - Activity discussion |
| *Yoga Sādhana* (25 mins) | | Neck movements<br>*Ardha Titali Āsana, Pūrṇa Titali Āsana, Śroṇi Cakra, Pāda Sañcalanāsana*<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Paścimottānāsana, Uṣṭrāsana*<br>_____<br>*Śavāsana,*<br>_____<br>*Bhastrikā*<br>*Ujjāyī Prāṇāyāma*<br>_____<br>*Nādanusandhāna* | *Sūrya Namaskāra* (1 round)<br>_____<br>*Vajrāsana, Supta Vajrāsana, Uṣṭrāsana, Tāḍāsana, Kaṭi Cakrāsana, Setu Bandhāsana, Ardha Śalabhāsana, Vakrāsana, Jānu Śīrṣāsana, Supta Baddha Koṇāsana, Utkatāsana, Naukāsana.*<br>_____<br>*Nāḍī-śhodhana Prāṇāyāma,*<br>_____<br>*Ajapa japa* | Hands in and out breathing, *Bhū Namanāsana, Pada Sañcalana*<br>_____<br>*Sūrya Namaskāra* (1 round),<br>_____<br>*Vṛkṣāsana, Trikoṇāsana, Vīrabhadrāsana*<br>_____<br>*Śavāsana,*<br>_____<br>*Nāḍī-śhodhana Prāṇāyāma,*<br>_____<br>*Bindu Trāṭaka* |

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| Month 4 | | | | |
|---|---|---|---|---|
| | 39th period | 42nd period | 45th period | 48th period |
| Yoga for Daily Life (15 mins) | Revision - chapter 2 | Yoga for Personal Excellence - *Preyas*, *Śhreyas*, The Choice of Excellence - Story of Nachiketa, Focusing on Higher Goals | Focusing on Higher Goals, Higher goals vs Smaller goals | Why is Excellence Hard? Yogic practices that help you excel - *Ekāgratā, Prāṇa, Tapas* |
| *Yoga Sādhana* (25 mins) | *Śaśāṅka Breathing, Ananthaśayana Breathing*, Stretching and compressing of the fingers and toes, *Jānu Śakti Vikāsaka,* _____ *Sūrya Namaskāra* (1 round), _____ *Vīrabhadrāsana Paścimottānāsana* _____ *Śavāsana,* _____ *Nāḍī-śhodhana Prāṇāyāma, Bhrāmarī,* _____ *Nādanusandhāna* | *Pādāṅguli Naman, Gulpha Naman, Jānu Naman, Jānu Chakra, Pūrṇa Titali* _____ *Sūrya Namaskāra* (1 round), _____ *Supta Vajrāsana, Uṣṭrāsana, Pavana Muktāsana, Parivṛtta Jānu Śīrṣāsana, Utthita Padmāsana* _____ *Śavāsana,* _____ *Ujjāyī* _____ *Oṁ Dhyāna* | *Aṅgulī Śakti Vikāsaka, Maṇi Bandha Śakti Vikāsaka, Kehuni Śakti Vikāsaka, Skandha Chakra, Greevasanchālana* _____ *Sūrya Namaskāra* (1 round), _____ *Utkaṭāsana, Vṛkṣāsana (R), Gomukhasana, Sarala Dhanurasana, Sarvāṅgāsana, Matsyāsana* _____ *Śavāsana,* _____ *Sūrya Bhedana, Candra Bhedana Prāṇāyāma* _____ *Bindu Trāṭaka* | Forward-backward bending, side bending, bending and twisting *Pavanamuktāsana Kriya, Gatyātmaka Meru Vakrāsana* *Sūrya Namaskāra* (1 round), _____ *Sarala Dhanurāsana , Sarvāṅgāsana, Matsyāsana* _____ *Śavāsana,* _____ Sectional breathing _____ *Antarmauna* |

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| Month 5 | | | | | |
|---|---|---|---|---|---|
| | 51st period | 54th period | 57th period | 60th period | |
| Yoga for Daily Life (15 mins) | Steps to Excellence - *Tapas*, Positivity, Emotional Intelligence, and Resilience | Steps to Excellence - *Sevā*, The *Prāṇa* Connection, *Svādhyāya*, Activity discussion | Activity discussion - Excellence Tracker, Sunday reflection | Revision - chapter 3 | Final Exam |
| *Yoga Sādhana* (25 mins) | *Śaśāṅka Breathing, Ananthaśayana* Breathing, Stretching and compressing of the fingers and toes, *Jānu Śakti Vikāsaka,* _____ *Sūrya Namaskāra* (1 round), _____ *Vīrabhadrāsana, Paśchimottānāsana* _____ *Śavāsana,* _____ *Nāḍī-śhodhana Prāṇāyāma, Bhrāmarī,* _____ *Pañchakośha Dhyāna* | *Pādāṅguli Naman, Gulpha Naman, Jānu Naman, Jānu Chakra, Pūrṇa Titali* _____ *Sūrya Namaskāra* (1 round), _____ *Supta Vajrāsana, Uṣṭrāsana, Pavana Muktāsana, Parivṛtta Jānu Śīrṣāsana, Utthita Padmāsana* _____ *Śavāsana,* _____ *Nāḍī-śhodhana Prāṇāyāma,* _____ *Antarmauna* | *Aṅgulī Śakti Vikāsaka, Maṇi Bandha Śakti Vikāsaka, Kehuni Śakti Vikāsaka, Skandha Chakra, Greevasanchālana* _____ *Sūrya Namaskāra* (1 round), _____ *Utkaṭāsana, Vṛkṣāsana (R), Gomukhasana, Sarala Dhanurasana, Sarvāṅgāsana, Matsyāsana* _____ *Śavāsana,* _____ *Sūrya Bhedana, Candra Bhedana Prāṇāyāma* _____ *Ajapa japa* | Revision - chapter 3 | |

| | |
|---|---|
| Total number of classes | 21 classes |
| Implementation Time per class | 40 minutes |

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